

<400> 695

ntgggtgactc aggcgtccaa tggcacgatg gctgacgtcg tcaatatgcc gtcctcgacc
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atcatggctc tgctgagggc tgattacctg ctcgatatcg agacttcggt gcccgggtatc
120
ggcgacaagt tcgtcccggg cgtctggggc aaactcaaac tcggcaagga caacgagcac
180
accgctctgc cctgggtactt cggcccgttc gtcgtgacgt acaacaagga cattttcaag
240
gatgttggcc tcgatcccga aatcccggcg aagacgatga ccgagtacct cgacttcgcc
300
aagaaaatca ccgctgccgg caagcaggcg gtctatggca acacgtcgtg gtacatgctc
360
gcggaatggc gtgccctcgg cgtcaaggtc atgaatgacg acttcaccaa gttcactttt
420
gcctcggaat ccaacgcgt
439

<210> 696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 696

Xaa Val Thr Gln Ala Ser Asn Gly Thr Met Ala Asp Val Val Asn Met
1 5 10 15
Pro Ser Ser Thr Ile Met Ala Leu Ser Arg Ala Asp Tyr Leu Leu Asp
20 25 30
Ile Glu Thr Ser Val Pro Gly Ile Gly Asp Lys Phe Val Pro Asp Val
35 40 45
Trp Gly Lys Leu Lys Leu Gly Lys Asp Asn Glu His Thr Ala Leu Pro
50 55 60
Trp Tyr Phe Gly Pro Phe Val Val Thr Tyr Asn Lys Asp Ile Phe Lys
65 70 75 80
Asp Val Gly Leu Asp Pro Glu Ile Pro Pro Lys Thr Met Thr Glu Tyr
85 90 95
Leu Asp Phe Ala Lys Lys Ile Thr Ala Ala Gly Lys Gln Ala Val Tyr
100 105 110
Gly Asn Thr Ser Trp Tyr Met Leu Ala Glu Trp Arg Ala Leu Gly Val
115 120 125
Lys Val Met Asn Asp Asp Phe Thr Lys Phe Thr Phe Ala Ser Glu Ser
130 135 140
Asn Ala
145

<210> 697

<211> 368

<212> DNA

<213> Homo sapiens

<400> 697

nggcaataac gccgtcgtcg aaatccgttc ccttgatctc gaacatgccg atgaagcggc
60

tgtcggatgat ggggtcggag atgtcgccct cccacaactt gaacttgatc ggaccaaccc
 120
 tttccaccct ggagagactc gcctgccttg aaagtcttct tgcccttctt gggcaactga
 180
 tcgcccctccc gaacgagata atccaagctc aagcgaccgc ccaccttgtc gcgcgcctcc
 240
 acaccgacgg aatgcgatgc cgggatcgca tcgatgctag cggcgggtgcg tgcaatgaca
 300
 atcttgtctt cagcgagcga tacggggcccg ccgttggaat cgaacacaaa caccttgaag
 360
 gcgttgtn
 368

<210> 698

<211> 108

<212> PRT

<213> Homo sapiens

<400> 698

Met	Pro	Met	Lys	Arg	Leu	Ser	Val	Met	Gly	Ser	Glu	Met	Ser	Pro	Ser
1				5					10					15	
His	Asn	Leu	Asn	Leu	Ile	Gly	Pro	Thr	Leu	Ser	Thr	Leu	Glu	Arg	Leu
			20				25						30		
Ala	Cys	Leu	Glu	Ser	Leu	Leu	Ala	Leu	Leu	Gly	Gln	Leu	Ile	Ala	Leu
		35					40					45			
Pro	Asn	Glu	Ile	Ile	Gln	Ala	Gln	Ala	Thr	Ala	His	Leu	Val	Ala	Arg
	50				55						60				
Leu	His	Thr	Asp	Gly	Met	Arg	Cys	Arg	Asp	Arg	Ile	Asp	Ala	Ser	Gly
65				70					75					80	
Gly	Ala	Cys	Asn	Asp	Asn	Leu	Val	Phe	Thr	Gln	Arg	Tyr	Gly	Pro	Ala
			85					90						95	
Val	Gly	Ile	Glu	His	Lys	His	Leu	Glu	Gly	Val	Val				
			100					105							

<210> 699

<211> 363

<212> DNA

<213> Homo sapiens

<400> 699

nacgcgtaca caaatagtat cggaatcatt tectatcatg ctgctatgac gagatttctc
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 cacacctcag attggcaact ggggatgact cggcactacc tgcgaagcg cggcgacgac
 120
 gaccacagg cacggtttac tgccgatcga atcgagacgg tgcgcaggct gggcgacgtt
 180
 gcccggaagg agggctgcga gtttgtcgtc gtcgccggag atgtcttcga aaccacaaat
 240
 gtctccactc agatcattgc ccgcgcgtgt gaggcgatag cctccattga tctccccgtg
 300
 tacctgctgc ccggaaatca cgacagctta gagccggggg gtctctggga tgggccagaa
 360
 ttc
 363

<210> 700
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 700
 Xaa Ala Tyr Thr Asn Ser Ile Gly Ile Ile Ser Tyr His Ala Ala Met
 1 5 10 15
 Thr Arg Phe Leu His Thr Ser Asp Trp Gln Leu Gly Met Thr Arg His
 20 25 30
 Tyr Leu Ser Lys Arg Gly Asp Asp Asp Pro Gln Ala Arg Phe Thr Ala
 35 40 45
 Asp Arg Ile Glu Thr Val Arg Arg Leu Gly Asp Val Ala Arg Lys Glu
 50 55 60
 Gly Cys Glu Phe Val Val Val Ala Gly Asp Val Phe Glu Thr His Asn
 65 70 75 80
 Val Ser Thr Gln Ile Ile Ala Arg Ala Cys Glu Ala Ile Ala Ser Ile
 85 90 95
 Asp Leu Pro Val Tyr Leu Leu Pro Gly Asn His Asp Ser Leu Glu Pro
 100 105 110
 Gly Cys Leu Trp Asp Gly Pro Glu Phe
 115 120

<210> 701
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 701
 nacggtccg ggcacaccgt caccgaggcg acgttccacg gccacccac gctgatctat
 60
 ttcggctacg tccattgcgc ggatgtctgc ccgctgacac tgggcaacat ggtctcggcc
 120
 ctcgatcgcc tgggctcccg ggcggacggc atcggtccga tcttcattctc cgtcgatccg
 180
 gcccgcgaca caccgcgct ggtcggacag tatgtcgcgc atttctcgcc gcggatcgtc
 240
 gggctgaccg gcaccgcagc gcagctggcg ccggtactgg cggagttcca catcaccgcg
 300
 cgcgcggaac ctgcggcaca cgacatggcc gccgacatgt atgccgtcga ccacagcgcc
 360
 ctctctatc tgatggacgg caacaaccgc ctgttgcggg tgatggcggt cagcgccgac
 420
 gctgcctcgc tgacgcacca gctggcgggc ggcctggccg gggcaagaat gagaccatga
 480
 aagcgatcgg accgacggac gccccgaac aggcagcgcc gggctggctg ttcggcatca
 540
 tcctgctgct cggcatcgcc ggcattgctg atttcgtcga ccggt
 585

<210> 702
 <211> 159
 <212> PRT

<213> Homo sapiens

<400> 702

```

Xaa Ala Ser Gly His Thr Val Thr Glu Ala Thr Phe His Gly His Pro
 1           5           10           15
Thr Leu Ile Tyr Phe Gly Tyr Val His Cys Ala Asp Val Cys Pro Leu
 20           25           30
Thr Leu Gly Asn Met Val Ser Ala Leu Asp Arg Leu Gly Ser Arg Ala
 35           40           45
Asp Gly Ile Val Pro Ile Phe Ile Ser Val Asp Pro Ala Arg Asp Thr
 50           55           60
Pro Ala Leu Val Gly Gln Tyr Val Ala His Phe Ser Pro Arg Ile Val
 65           70           75           80
Gly Leu Thr Gly Thr Ala Ala Gln Leu Ala Pro Val Leu Ala Glu Phe
 85           90           95
His Ile Thr Ala Arg Ala Glu Pro Ala Ala His Asp Met Ala Ala Asp
100           105           110
Met Tyr Ala Val Asp His Ser Ala Leu Leu Tyr Leu Met Asp Gly Asn
115           120           125
Asn Arg Leu Leu Arg Val Met Ala Val Ser Ala Asp Ala Ala Ser Leu
130           135           140
Thr His Gln Leu Ala Ala Gly Leu Ala Gly Ala Arg Met Arg Pro
145           150           155

```

<210> 703

<211> 390

<212> DNA

<213> Homo sapiens

<400> 703

```

ttctctgctc catacacacc tcagcagaat ggcacgcgcg agcgcaagaa cataactctt
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attgagatgg cccgaacgat gcttgatgag tacaagactc cgcggaagtt ctggcctgaa
120
gccattgata ctgcttgtca caccatcaac cgcgtttatc ttcacaaggt tttggagaaa
180
acctcttatg agttcctaac tggttaagaaa cccaatgtaa gctatttcag agtatttggg
240
gctaggtgct ggatcaagga tcctcatcac acttcaaaat ttgcaccgaa agcacatgaa
300
ggttttatgc ttggttacgg aaaggattcg cactcctaca gagtcttcaa cctctttcac
360
tataaagtgg ttcaaactgt ggatgtgcgn
390

```

<210> 704

<211> 130

<212> PRT

<213> Homo sapiens

<400> 704

```

Phe Ser Ala Pro Tyr Thr Pro Gln Gln Asn Gly Ile Ala Glu Arg Lys
 1           5           10           15
Asn Ile Thr Leu Ile Glu Met Ala Arg Thr Met Leu Asp Glu Tyr Lys

```

```

      20      25      30
Thr Pro Arg Lys Phe Trp Pro Glu Ala Ile Asp Thr Ala Cys His Thr
      35      40      45
Ile Asn Arg Val Tyr Leu His Lys Val Leu Glu Lys Thr Ser Tyr Glu
      50      55      60
Phe Leu Thr Gly Lys Lys Pro Asn Val Ser Tyr Phe Arg Val Phe Gly
65      70      75      80
Ala Arg Cys Trp Ile Lys Asp Pro His His Thr Ser Lys Phe Ala Pro
      85      90      95
Lys Ala His Glu Gly Phe Met Leu Gly Tyr Gly Lys Asp Ser His Ser
      100      105      110
Tyr Arg Val Phe Asn Leu Phe His Tyr Lys Val Val Gln Thr Val Asp
      115      120      125
Val Arg
      130

```

<210> 705
 <211> 513
 <212> DNA
 <213> Homo sapiens

```

<400> 705
acgcgtattt cgtccaaatg attcaaata aaacgccgcc gttaaaaacg atgcaggcga
60
agacaatgcg aataaaaaag gtggtaaata agcatgagtt ttaaaatgac acaatctcaa
120
tacacaagtc tttatggacc aactgtagga gactccgtga gattaggaga tacgaacttg
180
tttgacaaag ttgagaaaga ctatgcaaata tatggggatg aagctacttt cggtggcgga
240
aaatcaattc gtgatgggat ggctcaaaat cctaattgta caagagatga taaaatgta
300
gccgatttag ttttaactaa cgcattaatt attgattatg acaagattgt taaagcagat
360
atcgggtatta aaaatgggta tatttttaag attggtaaag ctggaaaccc agatataatg
420
gataacgttg acatcatcat tgggtgaaca actgatatta ttgctgctga aggtaaaatt
480
gttactgccg gcggtatcga tacacacgtg cac
513

```

<210> 706
 <211> 140
 <212> PRT
 <213> Homo sapiens

```

<400> 706
Met Ser Phe Lys Met Thr Gln Ser Gln Tyr Thr Ser Leu Tyr Gly Pro
1      5      10      15
Thr Val Gly Asp Ser Val Arg Leu Gly Asp Thr Asn Leu Phe Ala Gln
20      25      30
Val Glu Lys Asp Tyr Ala Asn Tyr Gly Asp Glu Ala Thr Phe Gly Gly
35      40      45
Gly Lys Ser Ile Arg Asp Gly Met Ala Gln Asn Pro Asn Val Thr Arg

```

```

      50              55              60
Asp Asp Lys Asn Val Ala Asp Leu Val Leu Thr Asn Ala Leu Ile Ile
65              70              75              80
Asp Tyr Asp Lys Ile Val Lys Ala Asp Ile Gly Ile Lys Asn Gly Tyr
      85              90              95
Ile Phe Lys Ile Gly Lys Ala Gly Asn Pro Asp Ile Met Asp Asn Val
      100              105              110
Asp Ile Ile Ile Gly Ala Thr Thr Asp Ile Ile Ala Ala Glu Gly Lys
      115              120              125
Ile Val Thr Ala Gly Gly Ile Asp Thr His Val His
      130              135              140

```

<210> 707
 <211> 409
 <212> DNA
 <213> Homo sapiens

```

<400> 707
acgcgtggca tcctcagacc accaaagaca atcctgtcct gggaggcagg gagaaagccg
60
gcacactaca cagtgcacag gtgaagccct caggggggtcc tggagcaggg ccacctccct
120
gggggatccc caggtgccat tttcatggca gtgtctatgg acggctcccc ttggcatggt
180
gctgggtggc aatcctggct gtagctgcca cccctgccc tttttgcttc cctccgaggg
240
catttgtgatc atcagtgtga gtctgttggg aaggagagcc aggtccccag gtttgggaaa
300
ggagtagggg tccccagcct gtctggccat cccccccag cccagcccct cctgctgggt
360
gacgtgctca gttcggcccc tgctgtactg ggaggggggt aggagcata
409

```

<210> 708
 <211> 136
 <212> PRT
 <213> Homo sapiens

```

<400> 708
Met Leu Leu Ala Pro Ser Gln Tyr Ser Arg Gly Arg Thr Glu His Val
1      5      10      15
Thr Gln Gln Glu Gly Leu Gly Trp Gly Val Met Ala Arg Gln Ala Gly
20      25      30
Lys Pro Tyr Ser Phe Pro Lys Pro Gly Asp Leu Ala Leu Leu Pro Asn
35      40      45
Arg Leu Thr Leu Met Ile Thr Met Pro Ser Glu Gly Ser Lys Lys Gly
50      55      60
Arg Gly Trp Gln Leu Gln Pro Gly Leu Pro Pro Ser Thr Met Pro Arg
65      70      75      80
Gly Ala Val His Arg His Cys His Glu Asn Gly Thr Trp Gly Ser Pro
85      90      95
Arg Glu Val Ala Leu Leu Gln Asp Pro Leu Arg Ala Ser Pro Val His
100      105      110
Cys Val Val Cys Arg Leu Ser Pro Cys Leu Pro Gly Gln Asp Cys Leu

```

115 120 125
 Trp Trp Ser Glu Asp Ala Thr Arg
 130 135
 <210> 709
 <211> 771
 <212> DNA
 <213> Homo sapiens
 <400> 709
 acgcgtctga cggagagcct cctgagtctc cccacgcaga ggactcagaa agggaaatcgg
 60
 tgaccacacc tgggccagcg acgtgtggtg cgccagcctc cccagcggat cacctcctcc
 120
 tcccctccca ggaggagagt ttctccgaag tccccatgag tgaagcaagc tcagcgaaag
 180
 acactccact ctttaggatg gagggagagg atgcccttgt gactcagtat cagagcaaag
 240
 ccagtgacca cgaaggttta ttgtctgacc ccttgagtga ccttcagttg gtctcagatt
 300
 ttaaatctcc aatcatggcc gatctgaact taagccttcc ttccattcct gaagtcgcat
 360
 cggatgatga aagaatagat cagggtgaag atgacggaga tcagggtgaa gatgatggag
 420
 agacagcaaa gtcgtcaact ctggacatag gagctttgtc cttgggcttg gtagtcccct
 480
 gtcctgagag gggaaagggg cccagtggcg aggcagatag gttggtactg ggggagggcc
 540
 tgtgtgattt caggctgcaa gcaccccagg catctgtgac agtccttca gagcagacca
 600
 cagagttcgg aattcacaaa ccacatcttg gcaagagctc aagcttggat aaacagctgc
 660
 caggccccag tgggtggtgag gaagaaaaac cgatgggaaa tgggagtcca agcccgcctc
 720
 ctggcacatc cctggacaat cctgtacca gccctcccc ttctgagatc t
 771

<210> 710
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 710
 Met Ser Glu Ala Ser Ser Ala Lys Asp Thr Pro Leu Phe Arg Met Glu
 1 5 10 15
 Gly Glu Asp Ala Leu Val Thr Gln Tyr Gln Ser Lys Ala Ser Asp His
 20 25 30
 Glu Gly Leu Leu Ser Asp Pro Leu Ser Asp Leu Gln Leu Val Ser Asp
 35 40 45
 Phe Lys Ser Pro Ile Met Ala Asp Leu Asn Leu Ser Leu Pro Ser Ile
 50 55 60
 Pro Glu Val Ala Ser Asp Asp Glu Arg Ile Asp Gln Val Glu Asp Asp
 65 70 75 80
 Gly Asp Gln Val Glu Asp Asp Gly Glu Thr Ala Lys Ser Ser Thr Leu

```

      85      90      95
Asp Ile Gly Ala Leu Ser Leu Gly Leu Val Val Pro Cys Pro Glu Arg
      100      105      110
Gly Lys Gly Pro Ser Gly Glu Ala Asp Arg Leu Val Leu Gly Glu Gly
      115      120      125
Leu Cys Asp Phe Arg Leu Gln Ala Pro Gln Ala Ser Val Thr Ala Pro
      130      135      140
Ser Glu Gln Thr Thr Glu Phe Gly Ile His Lys Pro His Leu Gly Lys
145      150      155      160
Ser Ser Ser Leu Asp Lys Gln Leu Pro Gly Pro Ser Gly Gly Glu Glu
      165      170      175
Glu Lys Pro Met Gly Asn Gly Ser Pro Ser Pro Pro Pro Gly Thr Ser
      180      185      190
Leu Asp Asn Pro Val Pro Ser Pro Ser Pro Ser Glu Ile
      195      200      205

```

<210> 711

<211> 432

<212> DNA

<213> Homo sapiens

<400> 711

```

nnngatccga cggcgcaaag ccttaatgaa gggtaggcag ttacctcttt ttctgtagga
60
attctcctgt tttatatcta ctcccccta gggttcaccc actccctcat cttctgagct
120
aatgtgcccc ctttatttgc acttgcatgg aatatgatta tgaacacagt ttttatcatt
180
gatgaccacc ccgttatcag gttggcgatt cgtatgttgt tggaacacga gggttataag
240
gtcgttggtg aaacggacaa cggttgtgac gcgatccaaa tggttcgcca atgcctgccg
300
gacctgatca tcctggatat cagcatcccg aaactcgacg gcctcgaagt gctctgccga
360
ttcaacgcca tgaacacatc catgaaaacc ctgattetta ccgccagag tccgacgttg
420
ttcgccacgc gt
432

```

<210> 712

<211> 93

<212> PRT

<213> Homo sapiens

<400> 712

```

Met Ile Met Asn Thr Val Phe Ile Ile Asp Asp His Pro Val Ile Arg
1      5      10      15
Leu Ala Ile Arg Met Leu Leu Glu His Glu Gly Tyr Lys Val Val Gly
20     25     30
Glu Thr Asp Asn Gly Cys Asp Ala Ile Gln Met Val Arg Glu Cys Leu
35     40     45
Pro Asp Leu Ile Ile Leu Asp Ile Ser Ile Pro Lys Leu Asp Gly Leu
50     55     60
Glu Val Leu Cys Arg Phe Asn Ala Met Asn Thr Ser Met Lys Thr Leu

```

```

65          70          75          80
Ile Leu Thr Ala Gln Ser Pro Thr Leu Phe Ala Thr Arg
      85          90

<210> 713
<211> 465
<212> DNA
<213> Homo sapiens

<400> 713
atcctgacgc ccaacggtgg tatgcagaac ccggtgggcg cgggtgttcaa ccccgacacc
60
atgcgcatgg aaatgaccga cttcgccgcg gtgatcttca acccggtggc gcaggccaag
120
ttcgtgcata cggtcagcgc gggctacgtg gccggcgcca tgttcgtcat gtcgatcagc
180
gcctgggtacc tgctcaaggg ccgccacacc gacctggcca agcgcctcgat ggcggtcgcc
240
gccagcttcg gcctggcgtc ggcgctgtcg gtcgtcgtgc tgggtgacga aagcggttat
300
ctcaccaccg aacaccagaa gatgaagatc gcggccatgg aatccatgtg gcacaccgag
360
ccggcgcccc cgtccttcaa cctgatcgcg ctgcccaccc aggccgaacg caagaacgac
420
ttcgccatcg agattcccta cgtcatgngc ctcatcgcca cgcgt
465

```

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<210> 714
<211> 155
<212> PRT
<213> Homo sapiens
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<400> 714															
Ile	Leu	Ile	Ala	Asn	Gly	Gly	Met	Gln	Asn	Pro	Val	Gly	Ala	Val	Phe
1				5					10					15	
Asn	Pro	Asp	Thr	Met	Arg	Met	Glu	Met	Thr	Asp	Phe	Ala	Ala	Val	Ile
			20					25					30		
Phe	Asn	Pro	Val	Ala	Gln	Ala	Lys	Phe	Val	His	Thr	Val	Ser	Ala	Gly
		35					40					45			
Tyr	Val	Ala	Gly	Ala	Met	Phe	Val	Met	Ser	Ile	Ser	Ala	Trp	Tyr	Leu
	50					55					60				
Leu	Lys	Gly	Arg	His	Thr	Asp	Leu	Ala	Lys	Arg	Ser	Met	Ala	Val	Ala
65					70					75					80
Ala	Ser	Phe	Gly	Leu	Ala	Ser	Ala	Leu	Ser	Val	Val	Val	Leu	Gly	Asp
				85					90					95	
Glu	Ser	Gly	Tyr	Leu	Thr	Thr	Glu	His	Gln	Lys	Met	Lys	Ile	Ala	Ala
			100					105					110		
Met	Glu	Ser	Met	Trp	His	Thr	Glu	Pro	Ala	Pro	Ala	Ser	Phe	Asn	Leu
		115					120					125			
Ile	Ala	Leu	Pro	Asn	Gln	Ala	Glu	Arg	Lys	Asn	Asp	Phe	Ala	Ile	Glu
	130					135					140				
Ile	Pro	Tyr	Val	Met	Xaa	Leu	Ile	Gly	Thr	Arg					
145					150					155					

<210> 715
<211> 354
<212> DNA
<213> Homo sapiens

<400> 715
nnaccggtgg atgccaacga atatcgtggc gagctgaaag tcggcgccat caccaccgcc
60
cagaccggcc tgctgcctca ggcactgggtg cgtttgcgcc aggcagcgcc gacggtggag
120
tgcaagttgg taccgggggt ttcctggag ttgctcagcc aggtggacgc aggcgagctg
180
gactcggcga tcatcattcg cccgcccttt gatttgccca aggagttgca cgtacaggta
240
ctgcgcaagg agccgtttgt gttgatcgtg cccagggcg tcgggggtga tgaccggtg
300
caactgctcg aagctcatcc ccacgtgcgc tacgaccgcg cttegttttg cggg
354

<210> 716
<211> 118
<212> PRT
<213> Homo sapiens

<400> 716
Xaa Pro Val Asp Ala Asn Glu Tyr Arg Gly Glu Leu Lys Val Gly Ala
1 5 10 15
Ile Thr Thr Ala Gln Thr Gly Leu Leu Pro Gln Ala Leu Val Arg Leu
20 25 30
Arg Gln Ala Ala Pro Thr Val Glu Cys Lys Leu Val Pro Gly Val Ser
35 40 45
Leu Glu Leu Leu Ser Gln Val Asp Ala Gly Glu Leu Asp Ser Ala Ile
50 55 60
Ile Ile Arg Pro Pro Phe Asp Leu Pro Lys Glu Leu His Val Gln Val
65 70 75 80
Leu Arg Lys Glu Pro Phe Val Leu Ile Val Pro Gln Ala Val Gly Gly
85 90 95
Asp Asp Pro Leu Gln Leu Leu Glu Ala His Pro His Val Arg Tyr Asp
100 105 110
Arg Ala Ser Phe Gly Gly
115

<210> 717
<211> 401
<212> DNA
<213> Homo sapiens

<400> 717
acgcgtatct ttccggtaaa cctactaatt ttccattcaa cgctcgacgc ccaggtaaag
60
ccgttaagtc atctaaatag gccattctgt ggctctccat cagtaagaac caaatccata
120
ggagaagttg agcggatagt aatgcatcaa attgatgctg agaaaccgaa aaatgggaca
180

atataatcaa gctgacaata ctgatcaaac cactcgcacg aaagctacta ccgcttgacc
 240
 accaagcaga aaaaaccaat gaaatgctta aaaataaaat cgtccaaagt aaaaagctag
 300
 accaggtggt agccagatta aaaataggcc gctctagaaa atgaaaagaa atccaatgag
 360
 attcaacggc gtagcaccag cacagcaaca tagccactag t
 401

<210> 718
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 718
 Met Leu Leu Cys Trp Cys Tyr Ala Val Glu Ser His Trp Ile Ser Phe
 1 5 10 15
 His Phe Leu Glu Arg Pro Ile Phe Asn Leu Ala Thr Thr Trp Ser Ser
 20 25 30
 Phe Leu Leu Trp Thr Ile Leu Phe Leu Ser Ile Ser Leu Val Phe Ser
 35 40 45
 Ala Trp Trp Ser Ser Gly Ser Ser Phe His Ala Ser Gly Leu Ile Ser
 50 55 60
 Ile Val Ser Leu Ile Ile Leu Ser His Phe Ser Val Ser Gln His Gln
 65 70 75 80
 Phe Asp Ala Leu Leu Ser Ala Gln Leu Leu Leu Trp Ile Trp Phe Leu
 85 90 95
 Leu Met Glu Ser His Arg Met Ala Tyr Leu Asp Asp Leu Thr Ala Leu
 100 105 110
 Pro Gly Arg Arg Ala Leu Asn Glu Lys Leu Val Gly Leu Pro Lys Arg
 115 120 125
 Tyr Ala
 130

<210> 719
 <211> 685
 <212> DNA
 <213> Homo sapiens

<400> 719
 tatatagggc tatctacctt attcacagca cattccatct acacaacctt gtagcgttca
 60
 ctcttgaagg cggattttca taggcgctgc gcctctcata ttcaagcatc aaggcaatcc
 120
 aatctccctg cgttggtaac tgggcaaaag aaagacctct gcagtccagc aacctcatcg
 180
 tgcaaagtcc gtggcgtggt caactctgac ggcctggaag ctgcagacct tgtcaaagga
 240
 cctcgccga aattcaccct tgatctcttt gtcttgtcca actcttgtcc ctgagaatga
 300
 aactgtcttc tgagagtcca tcaatgcgac gctgactcgt gagaagtgct gaatcacgtc
 360
 gccattttgg agacctgcca acgcagctct ggaacctgcc aggacgcctt ccacaacacc
 420

agaacgcagc gactttgcgt taaatccaag ctcaaacacc tcttgctcca caggcctgag
 480
 cataaaaagg tattctgcga cgggaaatgt aaagtctgag cttaggtgca gagtaccgcc
 540
 atcgatcagt gtctgatact gcttgctccgc gacttctttg ccgagcaatg ggtatagcgt
 600
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<210> 720

<211> 161

<212> PRT

<213> Homo sapiens

<400> 720

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			20					25					30		
Lys	Gln	Tyr	Gln	Thr	Leu	Ile	Asp	Gly	Gly	Thr	Leu	His	Leu	Ser	Ser
		35					40					45			
Asp	Phe	Thr	Phe	Pro	Val	Ala	Glu	Tyr	Leu	Phe	Met	Leu	Arg	Pro	Val
	50					55					60				
Glu	Gln	Glu	Val	Phe	Glu	Leu	Gly	Phe	Asn	Ala	Lys	Ser	Leu	Arg	Ser
65					70				75					80	
Gly	Val	Val	Glu	Gly	Val	Leu	Ala	Gly	Ser	Arg	Ala	Ala	Leu	Ala	Gly
				85				90					95		
Leu	Gln	Asn	Gly	Asp	Val	Ile	Gln	His	Phe	Ser	Arg	Val	Ser	Val	Ala
			100					105					110		
Leu	Met	Asp	Ser	Gln	Lys	Thr	Val	Ser	Phe	Ser	Gly	Thr	Arg	Val	Gly
		115					120					125			
Gln	Asp	Lys	Glu	Ile	Lys	Gly	Glu	Phe	Arg	Pro	Arg	Ser	Phe	Asp	Lys
	130					135					140				
Val	Cys	Ser	Phe	Gln	Ala	Val	Arg	Val	Asp	His	Ala	Thr	Ala	Phe	Ala
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Arg															

<210> 721

<211> 579

<212> DNA

<213> Homo sapiens

<400> 721

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 aggaacgctc tcagggtggc tgaagtctgg atggatgaat ttaaaagcca cgtctactgg
 180
 catggaacat accaggagga ctcaggaatt gacattgggg acatcactgc aaggaaggct
 240

ctcaggaaac agctgcagtg caagaccttc cgggtggtacc tggtcagcgt gtacccagag
 300
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 360
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 420
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 480
 cccaccgtgg atgatgatga caaccgatgc ctggtggacg tcaacagccg gccccggctc
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<210> 722

<211> 193

<212> PRT

<213> Homo sapiens

<400> 722

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Pro	Cys	Ser	Arg	Ile	Ala	His	Ile	Glu	Arg	Ala	His	Lys	Pro	Tyr	Thr
			20					25					30		
Glu	Asp	Leu	Thr	Ala	His	Val	Arg	Arg	Asn	Ala	Leu	Arg	Val	Ala	Glu
	35						40					45			
Val	Trp	Met	Asp	Glu	Phe	Lys	Ser	His	Val	Tyr	Trp	His	Gly	Thr	Tyr
	50					55					60				
Gln	Glu	Asp	Ser	Gly	Ile	Asp	Ile	Gly	Asp	Ile	Thr	Ala	Arg	Lys	Ala
65					70				75					80	
Leu	Arg	Lys	Gln	Leu	Gln	Cys	Lys	Thr	Phe	Arg	Trp	Tyr	Leu	Val	Ser
			85						90					95	
Val	Tyr	Pro	Glu	Met	Arg	Met	Tyr	Ser	Asp	Ile	Ile	Ala	Tyr	Gly	Val
		100						105					110		
Leu	Gln	Asn	Ser	Leu	Lys	Thr	Asp	Leu	Cys	Leu	Asp	Gln	Gly	Pro	Asp
	115						120					125			
Thr	Glu	Asn	Val	Pro	Ile	Met	Tyr	Ile	Cys	His	Gly	Met	Thr	Pro	Gln
	130					135					140				
Asn	Val	Tyr	Tyr	Thr	Ser	Ser	Gln	Gln	Ile	His	Val	Gly	Ile	Leu	Ser
145					150				155					160	
Pro	Thr	Val	Asp	Asp	Asp	Asp	Asn	Arg	Cys	Leu	Val	Asp	Val	Asn	Ser
			165					170						175	
Arg	Pro	Arg	Leu	Ile	Glu	Cys	Ser	Tyr	Ala	Lys	Ala	Lys	Arg	Met	Lys
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Leu

<210> 723

<211> 384

<212> DNA

<213> Homo sapiens

<400> 723

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 120
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 180
 accgtacaaa gtgtaaccga caaacctggt acggacgtca ctcgacaatg tcctaaatgg
 240
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 384

<210> 724
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 724
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 20 25 30
 Thr Pro Pro Gln Trp Arg Leu Phe Arg Glu Gly Asp Tyr Gln Met Arg
 35 40 45
 Ile Asp Thr Arg Ser Gly Thr Pro Thr Leu Met Leu Thr Val Gln Ser
 50 55 60
 Val Thr Asp Lys Pro Val Thr Asp Val Thr Arg Gln Cys Pro Lys Trp
 65 70 75 80
 Asp Gly Lys Pro Leu Thr Leu Asp Val Thr Asn Thr Phe Pro Glu Gly
 85 90 95
 Ser Val Val Arg Asp Phe Tyr Ser Lys Gln Thr Ala Met Val Gln Gln
 100 105 110
 Gly Lys Ile Thr Leu Gln Pro Ala Ala Asn Ser Asn Gly Leu Leu Leu
 115 120 125

<210> 725
 <211> 521
 <212> DNA
 <213> Homo sapiens

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 120
 gaaaataggt ttccttcttc cacaggcatg gagaaggaag gaaattttgc actggccttt
 180
 gggaagctga agaagagctg gggggaggct tgttctgaca aaatagtgaac tctctccctg
 240
 cttgaaatgt cccacagaag gctgtttctg gttcacattt gccctctag gtccactccc
 300
 tccccttcat cctgctcact gccagagaga ctatgctggg agtggtgcat cggtggtctc
 360

caggcccttt taggtcaag gtgttcattc cctggctcct tccctgccat gtctttgttc
420
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521

<210> 726

<211> 124

<212> PRT

<213> Homo sapiens

<400> 726

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Ser	Trp	Gly	Glu	Ala	Cys	Ser	Asp	Lys	Ile	Val	Thr	Leu	Ser	Leu	Leu
		20						25				30			
Glu	Met	Ser	His	Arg	Arg	Leu	Phe	Leu	Val	His	Ile	Cys	Pro	Ser	Arg
		35					40				45				
Ser	Thr	Pro	Ser	Pro	Ser	Ser	Cys	Ser	Leu	Pro	Glu	Arg	Leu	Cys	Trp
	50					55				60					
Glu	Trp	Cys	Ile	Gly	Gly	Leu	Gln	Ala	Leu	Leu	Gly	Ser	Arg	Cys	Ser
65				70				75						80	
Phe	Pro	Gly	Ser	Phe	Pro	Ala	Met	Ser	Leu	Phe	Leu	Pro	Pro	Ser	Phe
			85					90						95	
Pro	Ser	Gln	Gln	Pro	Pro	Ser	Ser	Phe	His	Gln	Thr	Trp	Glu	Pro	Ser
		100						105					110		
Ser	Gln	Pro	Gln	Ser	Pro	Arg	Gly	Ser	Ile	Thr	Arg				
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<210> 727

<211> 629

<212> DNA

<213> Homo sapiens

<400> 727

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tgccattatc gacgctggtg agttgaaggc tccgacgcat cgggcgtttg cgtcaatcag
180
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540

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 629

<210> 728
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 728
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 Ser Val Glu Leu Met Leu Asn Ala Ala Asn Leu Ala Leu Val Thr Phe
 35 40 45
 Ala His Val His Gly Ser Leu Asp Gly Gln Val Gly Val Phe Phe Val
 50 55 60
 Met Ile Val Ala Ala Ala Glu Val Val Val Gly Leu Ala Ile Ile Val
 65 70 75 80
 Thr Ile Phe Arg Ser Arg Arg Thr Thr Ser Val Asp Asp Thr Asn Leu
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 Leu Lys Phe

<210> 729
 <211> 4716
 <212> DNA
 <213> Homo sapiens

<400> 729
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 120
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 180
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 240
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 480
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<210> 730

<211> 797

<212> PRT

<213> Homo sapiens

<400> 730

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Thr	Asp	Thr	Val	Arg	Leu	Thr	Ser	Val	Val	Thr	Pro	Arg	Pro	Phe	Gly
			20					25					30		
Ser	Gln	Thr	Arg	Gly	Ile	Ser	Ser	Leu	Pro	Arg	Ser	Tyr	Thr	Met	Asp
	35						40					45			
Asp	Ala	Trp	Lys	Tyr	Asn	Gly	Asp	Val	Glu	Asp	Ile	Lys	Arg	Thr	Pro
	50					55				60					
Asn	Asn	Val	Val	Ser	Thr	Pro	Ala	Pro	Ser	Pro	Asp	Ala	Ser	Gln	Leu
65					70					75				80	
Ala	Ser	Ser	Leu	Ser	Ser	Gln	Lys	Glu	Val	Ala	Ala	Thr	Glu	Glu	Asp
			85						90					95	
Val	Thr	Arg	Leu	Pro	Ser	Pro	Thr	Ser	Pro	Phe	Ser	Ser	Leu	Ser	Gln
			100					105					110		
Asp	Gln	Ala	Ala	Thr	Ser	Lys	Ala	Thr	Leu	Ser	Ser	Thr	Ser	Gly	Leu
	115					120						125			
Asp	Leu	Met	Ser	Glu	Ser	Gly	Glu	Gly	Glu	Ile	Ser	Pro	Gln	Arg	Glu
	130					135					140				
Val	Ser	Arg	Ser	Gln	Asp	Gln	Phe	Ser	Asp	Met	Arg	Ile	Ser	Ile	Asn

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Gln Thr Pro Gly Lys Ser Leu Asp Phe Gly Phe Thr Ile Lys Trp Asp						
	165		170		175	
Ile Pro Gly Ile Phe Val Ala Ser Val Glu Ala Gly Ser Pro Ala Glu						
	180		185		190	
Phe Ser Gln Leu Gln Val Asp Asp Glu Ile Ile Ala Ile Asn Asn Thr						
	195		200		205	
Lys Phe Ser Tyr Asn Asp Ser Lys Glu Trp Glu Glu Ala Met Ala Lys						
	210		215		220	
Ala Gln Glu Thr Gly His Leu Val Met Asp Val Arg Arg Tyr Gly Lys						
225		230		235		240
Ala Gly Ser Pro Glu Thr Lys Trp Ile Asp Ala Thr Ser Gly Ile Tyr						
	245		250		255	
Asn Ser Glu Lys Ser Ser Asn Leu Ser Val Thr Thr Asp Phe Ser Glu						
	260		265		270	
Ser Leu Gln Ser Ser Asn Ile Glu Ser Lys Glu Ile Asn Gly Ile His						
	275		280		285	
Asp Glu Ser Asn Ala Phe Glu Ser Lys Ala Ser Glu Ser Ile Ser Leu						
	290		295		300	
Lys Asn Leu Lys Arg Arg Ser Gln Phe Phe Glu Gln Gly Ser Ser Asp						
305		310		315		320
Ser Val Val Pro Asp Leu Pro Val Pro Thr Ile Ser Ala Pro Ser Arg						
	325		330		335	
Trp Val Trp Asp Gln Glu Glu Glu Arg Lys Arg Gln Glu Arg Trp Gln						
	340		345		350	
Lys Glu Gln Asp Arg Leu Leu Gln Glu Lys Tyr Gln Arg Glu Gln Glu						
	355		360		365	
Lys Leu Arg Glu Glu Trp Gln Arg Ala Lys Gln Glu Ala Glu Arg Glu						
	370		375		380	
Asn Ser Lys Tyr Leu Asp Glu Glu Leu Met Val Leu Ser Ser Asn Ser						
385		390		395		400
Met Ser Leu Thr Thr Arg Glu Pro Ser Leu Ala Thr Trp Glu Ala Thr						
	405		410		415	
Trp Ser Glu Gly Ser Lys Ser Ser Asp Arg Glu Gly Thr Arg Ala Gly						
	420		425		430	
Glu Glu Glu Arg Arg Gln Pro Gln Glu Glu Val Val His Glu Asp Gln						
	435		440		445	
Gly Lys Lys Pro Gln Asp Gln Leu Val Ile Glu Arg Glu Arg Lys Trp						
	450		455		460	
Glu Gln Gln Leu Gln Glu Glu Gln Glu Gln Lys Arg Leu Gln Ala Glu						
465		470		475		480
Ala Glu Glu Gln Lys Arg Pro Ala Glu Glu Gln Lys Arg Gln Ala Glu						
	485		490		495	
Ile Glu Arg Glu Thr Ser Val Arg Ile Tyr Gln Tyr Arg Arg Pro Val						
	500		505		510	
Asp Ser Tyr Asp Ile Pro Lys Thr Glu Glu Ala Ser Ser Gly Phe Leu						
	515		520		525	
Pro Gly Asp Arg Asn Lys Ser Arg Ser Thr Thr Glu Leu Asp Asp Tyr						
	530		535		540	
Ser Thr Asn Lys Asn Gly Asn Asn Lys Tyr Leu Asp Gln Ile Gly Asn						
545		550		555		560
Thr Thr Ser Ser Gln Arg Arg Ser Lys Lys Glu Gln Val Pro Ser Gly						
	565		570		575	
Ala Glu Leu Glu Arg Gln Gln Ile Leu Gln Glu Met Arg Lys Arg Thr						

	580		585		590										
Pro	Leu	His	Asn	Asp	Asn	Ser	Trp	Ile	Arg	Gln	Arg	Ser	Ala	Ser	Val
	595						600					605			
Asn	Lys	Glu	Pro	Val	Ser	Leu	Pro	Gly	Ile	Met	Arg	Arg	Gly	Glu	Ser
	610						615					620			
Leu	Asp	Asn	Leu	Asp	Ser	Pro	Arg	Ser	Asn	Ser	Trp	Arg	Gln	Pro	Pro
625						630					635				640
Trp	Leu	Asn	Gln	Pro	Thr	Gly	Phe	Tyr	Ala	Ser	Ser	Ser	Val	Gln	Asp
				645					650					655	
Phe	Ser	Arg	Pro	Pro	Pro	Gln	Leu	Val	Ser	Thr	Ser	Asn	Arg	Ala	Tyr
			660						665				670		
Met	Arg	Asn	Pro	Ser	Ser	Ser	Val	Pro	Pro	Pro	Ser	Ala	Gly	Ser	Val
		675					680					685			
Lys	Thr	Ser	Thr	Thr	Gly	Val	Ala	Thr	Thr	Gln	Ser	Pro	Thr	Pro	Arg
	690					695					700				
Ser	His	Ser	Pro	Ser	Ala	Ser	Gln	Ser	Gly	Ser	Gln	Leu	Arg	Asn	Arg
705					710					715					720
Ser	Val	Ser	Gly	Lys	Arg	Ile	Cys	Ser	Tyr	Cys	Asn	Asn	Ile	Leu	Gly
				725					730					735	
Lys	Gly	Ala	Ala	Met	Ile	Ile	Glu	Ser	Leu	Gly	Leu	Cys	Tyr	His	Leu
		740					745					750			
His	Cys	Phe	Lys	Cys	Val	Ala	Cys	Glu	Cys	Asp	Leu	Gly	Gly	Ser	Ser
		755				760						765			
Ser	Gly	Ala	Glu	Val	Arg	Ile	Arg	Asn	His	Gln	Leu	Tyr	Cys	Asn	Asp
	770					775						780			
Cys	Tyr	Leu	Arg	Phe	Lys	Ser	Gly	Arg	Pro	Thr	Ala	Met			
785					790					795					

<210> 731

<211> 513

<212> DNA

<213> Homo sapiens

<400> 731

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120tcttcaaagt actgactggg gaaacagatt gttggaaaaa cactttcggg ttgcctcgat
180ggggtcaata ctttatcagg ccacaggaaa gacaaaggaa aatgcttcct gctggagcat
240gtgcacatat gttgttcctt taactccaaa tacgtatgca ggggtggtgg taggatcaga
300aaatgtgtga tcagaaagt accagttccc caccattttg tgtgggtttt attttctttc
360tgctccgtgt tgactctttt ccccaaca cggaagctgc ttaatccaaa gacttggacc
420atttcattct gtttcagatc cattccaaca aaatgatcag ttggtggctt atgtaaaaag
480cagctccatg actacattta aatattgact agt
513

<210> 732

<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 732
 Met Asp Leu Lys Gln Asn Glu Met Val Gln Val Phe Gly Leu Ser Ser
 1 5 10 15
 Phe Arg Val Val Gly Lys Arg Val Asn Thr Glu Gln Lys Glu Asn Lys
 20 25 30
 Thr His Thr Lys Trp Trp Gly Thr Gly His Phe Leu Ile Thr His Phe
 35 40 45
 Leu Ile Leu Pro Pro Pro Leu His Thr Tyr Leu Glu Leu Lys Glu Gln
 50 55 60
 His Met Cys Thr Cys Ser Ser Arg Lys His Phe Pro Leu Ser Phe Leu
 65 70 75 80
 Trp Pro Asp Lys Val Leu Thr Pro Ser Arg Gln Pro Glu Ser Val Phe
 85 90 95
 Pro Thr Ile Cys Phe Pro Ser Gln Ser Phe Glu Glu Ser Arg Glu Ala
 100 105 110
 Glu

<210> 733
 <211> 4366
 <212> DNA
 <213> Homo sapiens

<400> 733
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 120
 ggaggcctct tgaagaactc caggcctatc atgctgtctc tccgctaaag cctgaggccc
 180
 gaggtcagag gattcaggaa ggctctgcag tcggcccagg agggcggggg cccgtggtgg
 240
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 300
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 360
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 420
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 480
 ccagggttagg gggaggaaac ggtagagaga aataggtggg gctcccgcgc atgctcaata
 540
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 ggcgcggaat ttggagacc acttcgggaa aggtaaaatg cgggcgcaat tttagggtac
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 720
 acgcccgacc agagagtgtt tctccactcc cggactctgc cagtcaggat ggtggtgcct
 780

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900
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1020
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1200
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1260
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2100
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2160
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2400

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 4320
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 4366

<210> 734

<211> 364

<212> PRT

<213> Homo sapiens

<400> 734

Met	Val	Val	Pro	Ser	Leu	Lys	Leu	Gln	Asp	Leu	Ile	Glu	Glu	Ile	Arg
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Gly	Ala	Lys	Thr	Gln	Ala	Gln	Glu	Arg	Glu	Val	Ile	Gln	Lys	Glu	Cys
			20					25					30		
Ala	His	Ile	Arg	Ala	Ser	Phe	Arg	Asp	Gly	Asp	Pro	Val	His	Arg	His
	35						40					45			
Arg	Gln	Leu	Ala	Lys	Leu	Leu	Tyr	Val	His	Met	Leu	Gly	Tyr	Pro	Ala
	50				55						60				
His	Phe	Gly	Gln	Met	Glu	Cys	Leu	Lys	Leu	Ile	Ala	Ser	Ser	Arg	Phe
65				70					75					80	
Thr	Asp	Lys	Arg	Val	Gly	Tyr	Leu	Gly	Ala	Met	Leu	Leu	Leu	Asp	Glu
			85					90						95	
Arg	His	Asp	Ala	His	Leu	Leu	Ile	Thr	Asn	Ser	Ile	Lys	Asn	Asp	Leu
	100							105					110		
Ser	Gln	Gly	Ile	Gln	Pro	Val	Gln	Gly	Leu	Ala	Leu	Cys	Thr	Leu	Ser
	115						120					125			
Thr	Met	Gly	Ser	Ala	Glu	Met	Cys	Arg	Asp	Leu	Ala	Pro	Glu	Val	Glu
	130					135					140				
Lys	Leu	Leu	Leu	Gln	Pro	Ser	Pro	Tyr	Val	Arg	Lys	Lys	Ala	Ile	Leu
145				150					155					160	
Thr	Ala	Val	His	Met	Ile	Arg	Lys	Val	Pro	Glu	Leu	Ser	Ser	Val	Phe
			165					170						175	
Leu	Pro	Pro	Cys	Ala	Gln	Leu	Leu	His	Glu	Arg	His	His	Gly	Ile	Leu
	180							185					190		
Leu	Gly	Thr	Ile	Thr	Leu	Ile	Thr	Glu	Leu	Cys	Glu	Arg	Ser	Pro	Ala
	195						200					205			
Ala	Leu	Arg	His	Phe	Arg	Lys	Val	Val	Pro	Gln	Leu	Val	His	Ile	Leu
	210					215					220				
Arg	Thr	Leu	Val	Thr	Met	Gly	Tyr	Ser	Thr	Glu	His	Ser	Ile	Ser	Gly
225				230					235					240	
Val	Ser	Asp	Pro	Phe	Leu	Gln	Val	Gln	Ile	Leu	Arg	Leu	Leu	Arg	Ile
			245					250						255	
Leu	Gly	Arg	Asn	His	Glu	Glu	Ser	Ser	Glu	Thr	Met	Asn	Asp	Leu	Leu
	260						265					270			
Ala	Gln	Val	Ala	Thr	Asn	Thr	Asp	Thr	Ser	Arg	Asn	Ala	Gly	Asn	Ala

275	280	285
Val Leu Phe Glu Thr Val	Leu Thr Ile Met Asp Ile	Arg Ser Ala Ala
290	295	300
Gly Leu Arg Val Leu Ala	Val Asn Ile Leu Gly Arg	Phe Leu Leu Asn
305	310	315
Ser Asp Arg Asn Ile Arg	Tyr Val Ala Leu Thr Ser	Leu Leu Arg Leu
325	330	335
Val Gln Ser Asp His Ser	Ala Val Gln Arg His Arg	Pro Thr Val Val
340	345	350
Glu Cys Leu Arg Glu Thr	Asp Ala Ser Leu Ser Arg	
355	360	

<210> 735

<211> 597

<212> DNA

<213> Homo sapiens

<400> 735

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120
tgcttggtgt cctcgatccc gctctgaccg cccactggac cgctcaaccc aggacatcct
180
cagtgccatc cagcagctgg ctgcaccgct ggcactaccc atcttcgtgg tgggtgccac
240
agcgcgcgac attctgctga cacacgtgtt cggtatcgag accggacgtg ccacgctcga
300
cgtggatttc gccgttgccg tagaacattg gccgcagttc gaaaacatca agcagcacct
360
gctagccaac gaccatttcg actctgccgc cagcatcacc catcgactgc tctatcgcac
420
gagcgacaac acgatcgccc ggccaatcga tctcatccca ttcggcggca tcgaacagcc
480
gccagccacc atcaaattggc cgcccgcacat ggctgtcatg atgaatgttg ctggctacgc
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597

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<210> 736

<211> 175

<212> PRT

<213> Homo sapiens

<400> 736

Met Asp Ser Arg Asn Leu Glu Thr Ala Asn Leu Ile Pro Glu Lys Ile
1 5 10 15
Ile Ala Trp Cys Pro Arg Ser Arg Ser Asp Arg Pro Leu Asp Arg Ser
20 25 30
Thr Gln Asp Ile Leu Ser Ala Ile His Asp Val Ala Ala Pro Leu Ala
35 40 45
Leu Pro Ile Phe Val Val Gly Ala Thr Ala Arg Asp Ile Leu Leu Thr
50 55 60
His Val Phe Gly Ile Glu Thr Gly Arg Ala Thr Leu Asp Val Asp Phe


```

65          70          75          80
Ala Val Ala Val Glu His Trp Pro Gln Phe Glu Asn Ile Lys Gln His
          85          90          95
Leu Leu Ala Asn Asp His Phe Asp Ser Ala Ala Ser Ile Thr His Arg
          100         105         110
Leu Leu Tyr Arg Thr Ser Asp Asn Thr Ile Ala Arg Pro Ile Asp Leu
          115         120         125
Ile Pro Phe Gly Gly Ile Glu Gln Pro Pro Ala Thr Ile Lys Trp Pro
          130         135         140
Pro Asp Met Ala Val Met Met Asn Val Ala Gly Tyr Ala Asp Ala Trp
145          150          155          160
Arg Ala Ala Val Glu Val Glu Phe Val Pro Gly Arg Ser Ile Arg
          165          170          175

```

<210> 737
 <211> 497
 <212> DNA
 <213> Homo sapiens

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<400> 737
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120
caccctgccc tgtcctggat cagccacgtc accttcgtta aaactgtcag tgtgggggat
180
accatcggct acggcagaac atggacagcc agcgaaacga caaaaatcgc caccgtccca
240
gtcggttacg ccgacggact gtcccgagga ctgtcaaata aaggacacgt tctcattaga
300
gggtccgttc atcccatcgt cggtcggatc tgcattggacc aattcatggt cgatcttggc
360
cccgattcga acgtcacggt gggagatgag gtggtgctca ttggaaccca ggaggacgaa
420
actctgaccg ctgatgacat ggccgaactc ctcggaacca ttagctacga gatcacttgc
480
gccatttcca aacgcgt
497

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<210> 738
 <211> 165
 <212> PRT
 <213> Homo sapiens

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<400> 738
Xaa Arg Leu Ala Asn Ser Gly Ala Ile Leu Gly His Asp Leu Gly Lys
1          5          10          15
Thr Ser Met Val Arg Ala Gly Ile Val Gly Tyr Gly Tyr Asp Pro Asn
20         25         30
Pro His Ala Asp Arg Ala Asp Leu His Pro Ala Leu Ser Trp Ile Ser
35         40         45
His Val Thr Phe Val Lys Thr Val Ser Val Gly Asp Thr Ile Gly Tyr
50         55         60
Gly Arg Thr Trp Thr Ala Ser Glu Thr Thr Lys Ile Ala Thr Val Pro

```

```

65          70          75          80
Val Gly Tyr Ala Asp Gly Leu Ser Arg Gly Leu Ser Asn Lys Gly His
          85          90          95
Val Leu Ile Arg Gly Ser Val His Pro Ile Val Gly Arg Ile Cys Met
          100          105          110
Asp Gln Phe Met Val Asp Leu Gly Pro Asp Ser Asn Val Thr Val Gly
          115          120          125
Asp Glu Val Val Leu Ile Gly Thr Gln Glu Asp Glu Thr Leu Thr Ala
          130          135          140
Asp Asp Met Ala Glu Leu Leu Gly Thr Ile Ser Tyr Glu Ile Thr Cys
145          150          155          160
Ala Ile Ser Lys Arg
          165

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<210> 739
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<400> 739
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acggcctcat cagcagctgt gggctcaggc cccctcccg aggcggagca ggcgtggccg
120
cagagcagcg gggaggagga gctgcagctc cagctggccc tggccatgag caaggaggag
180
gccgaccage cccgctcctg cggccccgag gacgacgccc agctccagct ggcccttagt
240
ttgagccgag aagagcatga taaggaggag cggatccgtc gcggggatga cctgcggctg
300
cagatggcaa tcgaggagag caagagggag actgggggca aggaggagtc gtccctcatg
360
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420
ccagcaccca tggctgct
438

```

<210> 740
 <211> 146
 <212> PRT
 <213> Homo sapiens

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<400> 740
Arg Leu Arg Glu Glu Arg Ala His Ala Leu Lys Thr Lys Glu Lys Leu
1      5      10      15
Ala Gln Thr Ala Thr Ala Ser Ser Ala Ala Val Gly Ser Gly Pro Pro
20      25      30
Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu Glu Leu
35      40      45
Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp Gln Pro
50      55      60
Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln Leu Gln Leu Ala Leu Ser
65      70      75      80
Leu Ser Arg Glu Glu His Asp Lys Glu Glu Arg Ile Arg Arg Gly Asp

```

[illegible]

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<210> 741
<211> 726
<212> DNA
<213> Homo sapiens
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<400> 741
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120
cgagtgtgcc gccgcttgta tgtcgatgag cccccgcgg aaattattaa tactgactcg
180
atgggtggtgt atcgcgggat ggacattggc actgccaccc ctacactgcg cgagcagcgc
240
acggtagtgc atcacctggg gtcgattctt gatgtgactg tgccctcctc gctagtactg
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420
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480
ctgcatgacg agcttgcccg tcgcgatccc aaggcgggctg agtcaatctt gcccggaac
540
ggcaggcgaa tcgtttcgtg ccctcgaagt ttattgaccc tgacagggtc ctttactgcc
600
accgatcccc gacgggaccc tccactggcc aagacgggtgc aaatgggctt agaactgtcg
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720
gtcgac
726

```

```
<210> 742
<211> 242
<212> PRT
<213> Homo sapiens
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<400> 742
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 1             5             10             15
Asn Glu Tyr Val Asn Leu Pro Val Ile Cys Leu Val Gly Pro Thr Ala
      20             25             30
Ser Gly Lys Ser Gly Leu Ala Val Arg Val Cys Arg Arg Leu Tyr Val

```

```

      35      40      45
Asp Glu His Pro Ala Glu Ile Ile Asn Thr Asp Ser Met Val Val Tyr
  50      55      60
Arg Gly Met Asp Ile Gly Thr Ala Thr Pro Thr Leu Arg Glu Gln Arg
  65      70      75      80
Thr Val Val His His Leu Val Ser Ile Leu Asp Val Thr Val Pro Ser
      85      90      95
Ser Leu Val Leu Met Gln Thr Leu Ala Arg Asp Ala Val Glu Asp Cys
  100      105      110
Leu Ser Arg Gly Val Ile Pro Val Leu Val Gly Gly Ser Ala Leu Tyr
  115      120      125
Thr Lys Ala Ile Ile Asp Glu Met Ser Ile Pro Pro Thr Asp Pro Glu
  130      135      140
Val Arg Ala Arg Trp Gln Glu Lys Leu Asp Ala Glu Gly Pro Arg Val
  145      150      155      160
Leu His Asp Glu Leu Ala Arg Arg Asp Pro Lys Ala Ala Glu Ser Ile
      165      170      175
Leu Pro Gly Asn Gly Arg Arg Ile Val Ser Cys Pro Arg Ser Leu Leu
      180      185      190
Thr Leu Thr Gly Ser Phe Thr Ala Thr Asp Pro Arg Arg Asp Pro Pro
      195      200      205
Leu Ala Lys Thr Val Gln Met Gly Leu Glu Leu Ser Arg Lys Asp Ile
      210      215      220
Asp Gln Arg Ile Ala Asp Arg Val Asp Gln Met Trp Ala Tyr Gly Phe
  225      230      235      240
Val Asp

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<210> 743
 <211> 430
 <212> DNA
 <213> Homo sapiens

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<400> 743
naaaaaagtg atggtttcgg atctgtggcc agtcgtcttg caagaaatca ttatgacgtg
60
gatgagggca acagcancat tcatgttaat caagacattg cgcgcagaac agggacggga
120
aagctattgg tacgagtgtg cccggcgcac gtgtactcag aggagcccga tggcactatt
180
tccgtggagt acgcagcgtg tctggagtgt ggcacttgtc tggcggttgc tgcgccaggg
240
tcgcttgaat ggcactatcc cgcaggtgca atgggtattt cggtcagaga aggatgaagt
300
ccttggtggc gactgtaaag cgacatggcc gtcgctcggt aggaggaatt gtggtgtccg
360
caccaaatag tgctcaggat gaagttcgtc atggaaatcc ggctccaacc gtttcgggag
420
ctggtcgcga
430

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<210> 744
 <211> 98
 <212> PRT

<213> Homo sapiens

<400> 744

```

Xaa Lys Ser Asp Gly Phe Gly Ser Val Ala Ser Arg Leu Ala Arg Asn
 1           5           10           15
His Tyr Asp Val Asp Glu Gly Asn Ser Xaa Ile His Val Asn Gln Asp
      20           25           30
Ile Ala Arg Arg Thr Gly Thr Gly Lys Leu Leu Val Arg Val Cys Pro
      35           40           45
Ala His Val Tyr Ser Glu Glu Pro Asp Gly Thr Ile Ser Val Glu Tyr
      50           55           60
Ala Ala Cys Leu Glu Cys Gly Thr Cys Leu Ala Val Ala Ala Pro Gly
65           70           75           80
Ser Leu Glu Trp His Tyr Pro Ala Gly Ala Met Gly Ile Ser Phe Arg
      85           90           95
Glu Gly

```

<210> 745

<211> 362

<212> DNA

<213> Homo sapiens

<400> 745

```

cggccgattg aagcgctcgt gcggtttgag tcggtgatgg atgcggtgga cggtgcttcg
60
gcgtcgtggt ggcgcatggc gcggtatttc atcgccgagc ttgaacgcag cagcgagttg
120
tatgagcagg cggcgtttac ccgcatctg gaaagctcgc tgatcaaggg cctgatcctc
180
gccagccga acaactactc cgaagaactg cgcgacgtac tcggcgtgaa gctgccgcat
240
tacttgattc gcgcgcggca gtacatccac gacaacgcc gcgaagccgt gcatctggaa
300
gacctggaaa ccgctgccgg ggtatcgcg ttcaagttgt tcgatgcgtt tcgcaaatac
360
tt
362

```

<210> 746

<211> 108

<212> PRT

<213> Homo sapiens

<400> 746

```

Met Asp Ala Val Asp Gly Ala Ser Ala Ser Trp Trp Arg Met Ala Arg
 1           5           10           15
Tyr Phe Ile Ala Glu Leu Glu Arg Ser Ser Glu Leu Tyr Glu Gln Ala
      20           25           30
Ala Phe Thr Arg Asp Leu Glu Ser Ser Leu Ile Lys Gly Leu Ile Leu
      35           40           45
Ala Gln Pro Asn Asn Tyr Ser Glu Glu Leu Arg Asp Val Leu Gly Val
      50           55           60
Lys Leu Pro His Tyr Leu Ile Arg Ala Arg Gln Tyr Ile His Asp Asn

```

```

65              70              75              80
Ala Arg Glu Ala Val His Leu Glu Asp Leu Glu Thr Ala Ala Gly Val
              85              90              95
Ser Arg Phe Lys Leu Phe Asp Ala Phe Arg Lys Tyr
              100              105

```

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<210> 747
<211> 416
<212> DNA
<213> Homo sapiens
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<400> 747
nagcgcgttga tcgccgccga ccgtttcatc ccgcaatcac ccgacatggc ggcctatttt
60
ctgaatgccg atggcacgcc taaagccacc ggcacgctgc tcaagaaccc agcgttgccc
120
gccgtgttca aacgtatcgc caaggaagga ccggacgcgc tgtaccacgg gccgattgcc
180
gacgagatcg cgcgcaaggc tcagggcaac cgcaatgcgg gcagcctgtc gcaagcggac
240
ctcaaggctt acaccgcca ggaacgcacg ccgctgtgca ccgactacaa gcaatatcag
300
gtgtgcggca tgccaccgcc gtcgtcaggc gggattgcgg tggcgcagat ctcgggcacg
360
ctgcaggccg tggaagcccg cgaccacgc ctggccatcg ccccatgaa accggc
416
```

```
<210> 748
<211> 138
<212> PRT
<213> Homo sapiens
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<400> 748															
Xaa	Ala	Leu	Ile	Ala	Ala	Asp	Arg	Phe	Ile	Pro	Gln	Ser	Pro	Asp	Met
1				5					10					15	
Ala	Ala	Tyr	Phe	Leu	Asn	Ala	Asp	Gly	Thr	Pro	Lys	Ala	Thr	Gly	Thr
			20					25						30	
Leu	Leu	Lys	Asn	Pro	Ala	Leu	Ala	Ala	Val	Phe	Lys	Arg	Ile	Ala	Lys
		35					40					45			
Glu	Gly	Pro	Asp	Ala	Leu	Tyr	His	Gly	Pro	Ile	Ala	Asp	Glu	Ile	Ala
	50					55					60				
Arg	Lys	Val	Gln	Gly	Asn	Arg	Asn	Ala	Gly	Ser	Leu	Ser	Gln	Ala	Asp
65					70					75					80
Leu	Lys	Ala	Tyr	Thr	Ala	Lys	Glu	Arg	Thr	Pro	Leu	Cys	Thr	Asp	Tyr
			85					90						95	
Lys	Gln	Tyr	Gln	Val	Cys	Gly	Met	Pro	Pro	Pro	Ser	Ser	Gly	Gly	Ile
			100					105						110	
Ala	Val	Ala	Gln	Ile	Leu	Gly	Thr	Leu	Gln	Ala	Val	Glu	Ala	Arg	Asp
		115					120							125	
Pro	Arg	Leu	Ala	Ile	Ala	Pro	Met	Lys	Pro						
	130						135								

<210> 749
<211> 1211

<212> DNA

<213> Homo sapiens

<400> 749

nagtcctaga cgccagaccc gctcagaccc tcttgccagg tgacagccgc caagatgggg
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tcttggggcc tgetgtggcc tcccctgctg ttcaccgggc tgctcgccg acccccgggg
120
accatggccc aggcccagta ctgctctgtg aacaaggaca tctttgaagt agaggagaac
180
acaaatgtca ccgagccgct ggtggacatc cacgtcccgg agggccagga ggtgaccctc
240
ggagccttgt ccaccccctt tgcatttcgg atccagggaa accagctgtt tctcaacgtg
300
actcctgatt acgaggagaa gtcactgctt gaggtcagc tgctgtgtca gagcggaggc
360
acattggtga cccagctaag ggtgttcgtg tcagtgtctg acgtcaatga caatgcccc
420
gaattccctt ttaagaccaa ggagataagg gtggaggagg acacgaaagt gaactccacc
480
gtcatccccg agacgcaact gcaggctgag gaccgcgaca aggacgacat tctgttctac
540
accctccagg aaatgacagc aggtgccagt gactacttct ccctgggtgag tgtaaaccgt
600
cccgcctga ggctggaccg gccctggac ttctacgagc ggccgaacat gaccttctgg
660
ctgctggtgc gggacactcc gggggagaat gtggaacca gccacactgc caccgccaca
720
ctagtgtga acgtggtgcc cgccgacctg cgcccccggt ggttcctgcc ctgcacctc
780
tcagatggct acgtctgcat tcaagctcag taccagggg ctgtccccac ggggcacata
840
ctgccatctc cctcgtcct gcgtcccgga cccatctacg ctgaggacgg agaccgcggc
900
atcaaccagc ccatcatcta cagcatcttt aggggaaacg tgaatggtac attcatcatc
960
caccagact cgggcaacct caccgtggcc aggagtgtcc ccagccccat gaccttcctt
1020
ctgctggtga agggccaaca ggccgacctt gcccgctact cagtgacca ggtcaccgtg
1080
gagggctgtg gctgcggccg ggagcccgcc ccgcttcccc cagagcctgt atcgtggcac
1140
cgtggcgctg ggcgctggag cgggcgttgt ggtcaaggat gcagctgccc cttttcagcc
1200
tctgaggatc c
1211

<210> 750

<211> 385

<212> PRT

<213> Homo sapiens

<400> 750

Met Gly Ser Trp Ala Leu Leu Trp Pro Pro Leu Leu Phe Thr Gly Leu

1	5	10	15
Leu Val Arg Pro Pro Gly Thr Met Ala Gln Ala Gln Tyr Cys Ser Val			
20	25	30	
Asn Lys Asp Ile Phe Glu Val Glu Glu Asn Thr Asn Val Thr Glu Pro			
35	40	45	
Leu Val Asp Ile His Val Pro Glu Gly Gln Glu Val Thr Leu Gly Ala			
50	55	60	
Leu Ser Thr Pro Phe Ala Phe Arg Ile Gln Gly Asn Gln Leu Phe Leu			
65	70	75	80
Asn Val Thr Pro Asp Tyr Glu Glu Lys Ser Leu Leu Glu Ala Gln Leu			
85	90	95	
Leu Cys Gln Ser Gly Gly Thr Leu Val Thr Gln Leu Arg Val Phe Val			
100	105	110	
Ser Val Leu Asp Val Asn Asp Asn Ala Pro Glu Phe Pro Phe Lys Thr			
115	120	125	
Lys Glu Ile Arg Val Glu Glu Asp Thr Lys Val Asn Ser Thr Val Ile			
130	135	140	
Pro Glu Thr Gln Leu Gln Ala Glu Asp Arg Asp Lys Asp Asp Ile Leu			
145	150	155	160
Phe Tyr Thr Leu Gln Glu Met Thr Ala Gly Ala Ser Asp Tyr Phe Ser			
165	170	175	
Leu Val Ser Val Asn Arg Pro Ala Leu Arg Leu Asp Arg Pro Leu Asp			
180	185	190	
Phe Tyr Glu Arg Pro Asn Met Thr Phe Trp Leu Leu Val Arg Asp Thr			
195	200	205	
Pro Gly Glu Asn Val Glu Pro Ser His Thr Ala Thr Ala Thr Leu Val			
210	215	220	
Leu Asn Val Val Pro Ala Asp Leu Arg Pro Pro Trp Phe Leu Pro Cys			
225	230	235	240
Thr Phe Ser Asp Gly Tyr Val Cys Ile Gln Ala Gln Tyr His Gly Ala			
245	250	255	
Val Pro Thr Gly His Ile Leu Pro Ser Pro Leu Val Leu Arg Pro Gly			
260	265	270	
Pro Ile Tyr Ala Glu Asp Gly Asp Arg Gly Ile Asn Gln Pro Ile Ile			
275	280	285	
Tyr Ser Ile Phe Arg Gly Asn Val Asn Gly Thr Phe Ile Ile His Pro			
290	295	300	
Asp Ser Gly Asn Leu Thr Val Ala Arg Ser Val Pro Ser Pro Met Thr			
305	310	315	320
Phe Leu Leu Leu Val Lys Gly Gln Gln Ala Asp Leu Ala Arg Tyr Ser			
325	330	335	
Val Thr Gln Val Thr Val Glu Gly Cys Gly Cys Gly Arg Glu Pro Ala			
340	345	350	
Pro Leu Pro Pro Glu Pro Val Ser Trp His Arg Gly Ala Trp Arg Trp			
355	360	365	
Ser Gly Arg Cys Gly Gln Gly Cys Ser Cys Pro Phe Ser Ala Ser Glu			
370	375	380	
Asp			
385			

<210> 751

<211> 345

<212> DNA

<213> Homo sapiens

<400> 751
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 60
 gcaggcggcg ggctgtcgcg caccgaggag aagctcgctg agatgtcgaa cggctgcate
 120
 tgctgcacgc tgcgcgacga cctgatgcag gaagtggcga gactggcggg cgaaggccgc
 180
 ttcgatgcgc tggatcatga gagcaccggc gtgtccgagc cgatgccggg cgcgcgccacg
 240
 ttcgatttcc gtgaccagga cggcgtctcg ctgcgcgacg tcgcgcggct ggataccatg
 300
 gtcaccgtcg tcgacgcgcg gtccttcctg cgcgactacg gctcg
 345

<210> 752
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 752
 Arg Val Ala Val Ile Val Asn Asp Met Ser Glu Val Asn Ile Asp Ala
 1 5 10 15
 Ala Leu Val Ala Ala Gly Gly Gly Leu Ser Arg Thr Glu Glu Lys Leu
 20 25 30
 Val Glu Met Ser Asn Gly Cys Ile Cys Cys Thr Leu Arg Asp Asp Leu
 35 40 45
 Met Gln Glu Val Ala Arg Leu Ala Gly Glu Gly Arg Phe Asp Ala Leu
 50 55 60
 Val Ile Glu Ser Thr Gly Val Ser Glu Pro Met Pro Val Ala Ala Thr
 65 70 75 80
 Phe Asp Phe Arg Asp Gln Asp Gly Val Ser Leu Ala Asp Val Ala Arg
 85 90 95
 Leu Asp Thr Met Val Thr Val Val Asp Ala Ala Ser Phe Leu Arg Asp
 100 105 110
 Tyr Gly Ser
 115

<210> 753
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 753
 gcgcgccagt acgccaagac cgtccgcaag gaccgcaagg gcgaacggcg gcgtcggggc
 60
 gcgtcggact agtccacgat gcatccgaac cgcgccttcc gctttgccga tgatgtctcg
 120
 atgctcgatt tcgcggccaa gcgagccttt gcgcacatct tcgtgagcac gcccgagggg
 180
 cctatggtag cgcattgccc gggtacgccc ttcgacggag ccttcgctt ccatgtcgcg
 240
 cgcggcaate ggatcgcgcg gcacctggat ggcgcgacgc tgctgctcag catcagcgcg
 300

accgacggct atatcagccc gagctggtac gccgacccgc agggaccaca gt
352

<210> 754
<211> 91
<212> PRT
<213> Homo sapiens

<400> 754
Met His Pro Asn Arg Ala Phe Arg Phe Ala Asp Asp Val Ser Met Leu
1 5 10 15
Asp Phe Ala Ala Lys Arg Ala Phe Ala His Ile Phe Val Ser Thr Pro
20 25 30
Glu Gly Pro Met Val Ala His Ala Pro Val Thr Pro Phe Asp Gly Ala
35 40 45
Phe Arg Phe His Val Ala Arg Gly Asn Arg Ile Ala Arg His Leu Asp
50 55 60
Gly Ala Thr Leu Leu Leu Ser Ile Ser Ala Thr Asp Gly Tyr Ile Ser
65 70 75 80
Pro Ser Trp Tyr Ala Asp Pro Gln Gly Pro Gln
85 90

<210> 755
<211> 301
<212> DNA
<213> Homo sapiens

<400> 755
tgggatgcag ggtcttttctt ctccaaggat ttcattcctg gagggagaaa agggccccag
60
ctgtctgcca tcaaaccggg ttgccgggct ggagctcctc ccaggcccgt gtgaggaaga
120
gcaaaggccg gcaggggctc gatgggacca gtcgctcgct caggcccagg aaaaccacac
180
agctgggggc tgtcaggatt ggaccagggt caggccggcc aggcgatggc gggaaaagca
240
ggcccactct gcagacctca atgtctcagg tgcactgcag ggcaaccccg cctaccccg
300
g
301

<210> 756
<211> 99
<212> PRT
<213> Homo sapiens

<400> 756
Met Gln Gly Leu Ser Ser Pro Arg Ile Ser Phe Leu Glu Gly Glu Lys
1 5 10 15
Gly Pro Ser Cys Leu Pro Ser Asn Arg Val Ala Gly Leu Glu Leu Leu
20 25 30
Pro Gly Pro Cys Glu Glu Glu Gln Arg Pro Ala Gly Ala Arg Trp Asp
35 40 45
Gln Ser Leu Ala Gln Ala Gln Glu Asn His Thr Ala Gly Gly Cys Gln

50 55 60
 Asp Trp Thr Arg Val Arg Pro Ala Arg Arg Trp Arg Glu Lys Gln Ala
 65 70 75 80
 His Ser Ala Asp Leu Asn Val Ser Gly Ala Leu Gln Gly Asn Pro Ala
 85 90 95
 Tyr Pro Gly

<210> 757
 <211> 311
 <212> DNA
 <213> Homo sapiens

<400> 757
 actgaggcga tcgccagagg ggtgggcgtg cgagggctgc tcaacatcca gtctgccttg
 60
 gtctccgatg ttctctacgt catcgaggcc aaccccaggg catcgcgcac agtccccttc
 120
 gtctcaaagg catccggcgt gcagctcgcc aaagcggcgg ccctcatcat gacaggggag
 180
 acgatcgctt cgctcaggcg ctccggccac ctgcccaggg ccgacgccgc cgtcaccgat
 240
 cccgatgacc cgatcgccgt caaggaggcg gtcctaccct tcaaacgatt ccgcaccacc
 300
 gagggacgcg t
 311

<210> 758
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 758
 Thr Glu Ala Ile Ala Arg Gly Val Gly Val Arg Gly Leu Leu Asn Ile
 1 5 10 15
 Gln Phe Ala Leu Val Ser Asp Val Leu Tyr Val Ile Glu Ala Asn Pro
 20 25 30
 Arg Ala Ser Arg Thr Val Pro Phe Val Ser Lys Ala Ser Gly Val Gln
 35 40 45
 Leu Ala Lys Ala Ala Ala Leu Ile Met Thr Gly Glu Thr Ile Ala Ser
 50 55 60
 Leu Arg Arg Ser Gly His Leu Pro Glu Ala Asp Ala Ala Val Thr Asp
 65 70 75 80
 Pro Asp Asp Pro Ile Ala Val Lys Glu Ala Val Leu Pro Phe Lys Arg
 85 90 95
 Phe Arg Thr Thr Glu Gly Arg
 100

<210> 759
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 759

gtgcacaccg gcaagctggt gtggaactgg gacagcggca acccggacga cactacgccg
60
attgccgagg gcaagaccta caccgcgaac tcgccgaaca tgtggtccat gttcgccgtc
120
gacgaaaaac tcggcatgct ctacctgccg atgggcaacc agaccccgga ccagttcggg
180
ggctaccgca cgcctgcgtc ggaactgcac gctgccggcc tgacagcgtt ggatatacga
240
actggtaaag tgcgctggca ctaccagttc acccaccatg acctgtggga catggacgtg
300
ggcggccagc cgagcctgat cgacatcaag accgccgccg gcgtgaaaca agccgtgatg
360
gcctcgacca agcaaggcag catctacgct t
391

<210> 760
<211> 130
<212> PRT
<213> Homo sapiens

<400> 760
Val His Thr Gly Lys Leu Val Trp Asn Trp Asp Ser Gly Asn Pro Asp
1 5 10 15
Asp Thr Thr Pro Ile Ala Glu Gly Lys Thr Tyr Thr Arg Asn Ser Pro
20 25 30
Asn Met Trp Ser Met Phe Ala Val Asp Glu Lys Leu Gly Met Leu Tyr
35 40 45
Leu Pro Met Gly Asn Gln Thr Pro Asp Gln Phe Gly Gly Tyr Arg Thr
50 55 60
Pro Ala Ser Glu Leu His Ala Ala Gly Leu Thr Ala Leu Asp Ile Asp
65 70 75 80
Thr Gly Lys Val Arg Trp His Tyr Gln Phe Thr His His Asp Leu Trp
85 90 95
Asp Met Asp Val Gly Gly Gln Pro Ser Leu Ile Asp Ile Lys Thr Ala
100 105 110
Ala Gly Val Lys Gln Ala Val Met Ala Ser Thr Lys Gln Gly Ser Ile
115 120 125
Tyr Ala
130

<210> 761
<211> 324
<212> DNA
<213> Homo sapiens

<400> 761
cctaggtagg cccaaagggg cctaactttc ttgctgccct ggtggagcaa gaaatatctt
60
ctaggagagg ccaatccttc cctgccccac agctccttct ctgcaaagct cagggggcaa
120
tcaggtacct cctgcccgaag aggcccccat ggttcctcgc ctaaggaagg cagggcgggg
180
cattggggagc cgttgacagc tgggctcagc tggggggagg ggtcagtttg ggagcaggtg
240

cagatttcag ggaggggggg gcctaaaggg aagtagggat cttggtaggc tgcaaaattt
300

tcctcccat ccccatcca caga
324

<210> 762

<211> 105

<212> PRT

<213> Homo sapiens

<400> 762

Met	Gly	Asp	Gly	Glu	Glu	Asn	Phe	Ala	Ala	Tyr	Gln	Asp	Pro	Tyr	Phe
1				5					10					15	
Pro	Leu	Gly	Pro	Pro	Leu	Pro	Glu	Ile	Cys	Thr	Cys	Ser	Gln	Thr	Asp
			20				25						30		
Pro	Ser	Pro	Gln	Leu	Ser	Pro	Ala	Val	Asn	Gly	Ser	Gln	Cys	Pro	Ala
			35				40					45			
Leu	Pro	Ser	Leu	Gly	Glu	Glu	Pro	Trp	Gly	Pro	Leu	Gly	Gln	Glu	Val
	50				55				60						
Pro	Asp	Cys	Pro	Leu	Ser	Phe	Ala	Glu	Lys	Glu	Leu	Trp	Gly	Arg	Glu
65				70					75					80	
Gly	Leu	Ala	Ser	Pro	Arg	Arg	Tyr	Phe	Leu	Leu	His	Gln	Gly	Ser	Lys
			85					90					95		
Lys	Val	Arg	Pro	Leu	Trp	Ala	Tyr	Leu							
			100				105								

<210> 763

<211> 301

<212> DNA

<213> Homo sapiens

<400> 763

acgcgttatg ggcgccccgg atgggcgatg cgctatccca cacctcgatg atggcggaca
60
tcctcggcgg tgtgctggaa gtggcgggcca atatcgcatg tactgcgggc gcgaccgctg
120
ccgcggtggc cgccaccggc tttaccgagg ccaccggcgg cctcggctgc ttctgctgg
180
gcgctgcctt gggcaccatt gccggcctgg ccatgagcaa cattggcgcg gacacagggc
240
tgaccaagat atgcaatgcc tttaacaacg ccttatttgc gccaccgtg catgcgaaca
300
t
301

<210> 764

<211> 100

<212> PRT

<213> Homo sapiens

<400> 764

Met	Phe	Ala	Cys	Thr	Val	Gly	Ala	Asn	Lys	Ala	Leu	Leu	Lys	Ala	Leu
1				5					10					15	
His	Ile	Leu	Val	Ser	Pro	Val	Ser	Ala	Pro	Met	Leu	Leu	Met	Ala	Arg

[illegible]

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<210> 765
<211> 831
<212> DNA
<213> Homo sapiens
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<400> 765
ngcacactcc agcctctgtt ctttctctcc ttgtgccttt gcccttacca cggttcctca
60
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120
agcctccaga atcacaatca ccagctgaaa ggggaggtcc tgagatataa gcggaaattg
180
agagaagccc agtctgacct gaacaagaca cgcctgcgta gtggtagtgc cctcctgcag
240
tcccagtcta gtactgagga cccgaaggat gagcctgcgg agctaaaacc agattctggg
300
gacttatect cccagtcctc agcttcaaag gcatctcagg aggatgccaa tgaaatcaag
360
tctaaacggg atgaagaaga acgagaacga gaaaggaggg agaaggagag ggaacgagaa
420
agagaacggg agaaggagaa ggagagagaa cgagagaagc agaagctaaa agagtcagaa
480
aaagagagag attctgctaa ggataaagag aaaggcaaac atgatgatgg acggaaaaag
540
gaagcagaaa ttatcaaaca attgaagatt gaactcaaga aggcacagga gagccaaaag
600
gagatgaaac tattgctgga tatgtaccgt tctgccccaa aggaacagag agacaaagtt
660
cagctgatgg cagctgagaa gaagtctaag gcagagttgg aagatctaag gcaaagactc
720
aaggatctgg aagataaaga gaagaaagag aacaagaaaa tggctgatga ggatgccttg
780
aggaagatcc gggcagtgga ggagcagata gaatacctac agaagaagct a
831
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```
<210> 766
<211> 243
<212> PRT
<213> Homo sapiens
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<400> 766
Met Arg His Leu Ile Ser Ser Leu Gln Asn His Asn His Gln Leu Lys

1 5 10 15
 Gly Glu Val Leu Arg Tyr Lys Arg Lys Leu Arg Glu Ala Gln Ser Asp
 20 25 30
 Leu Asn Lys Thr Arg Leu Arg Ser Gly Ser Ala Leu Leu Gln Ser Gln
 35 40 45
 Ser Ser Thr Glu Asp Pro Lys Asp Glu Pro Ala Glu Leu Lys Pro Asp
 50 55 60
 Ser Gly Asp Leu Ser Ser Gln Ser Ser Ala Ser Lys Ala Ser Gln Glu
 65 70 75 80
 Asp Ala Asn Glu Ile Lys Ser Lys Arg Asp Glu Glu Glu Arg Glu Arg
 85 90 95
 Glu Arg Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Arg Glu Lys Glu
 100 105 110
 Lys Glu Arg Glu Arg Glu Lys Gln Lys Leu Lys Glu Ser Glu Lys Glu
 115 120 125
 Arg Asp Ser Ala Lys Asp Lys Glu Lys Gly Lys His Asp Asp Gly Arg
 130 135 140
 Lys Lys Glu Ala Glu Ile Ile Lys Gln Leu Lys Ile Glu Leu Lys Lys
 145 150 155 160
 Ala Gln Glu Ser Gln Lys Glu Met Lys Leu Leu Leu Asp Met Tyr Arg
 165 170 175
 Ser Ala Pro Lys Glu Gln Arg Asp Lys Val Gln Leu Met Ala Ala Glu
 180 185 190
 Lys Lys Ser Lys Ala Glu Leu Glu Asp Leu Arg Gln Arg Leu Lys Asp
 195 200 205
 Leu Glu Asp Lys Glu Lys Lys Glu Asn Lys Lys Met Ala Asp Glu Asp
 210 215 220
 Ala Leu Arg Lys Ile Arg Ala Val Glu Glu Gln Ile Glu Tyr Leu Gln
 225 230 235 240
 Lys Lys Leu

<210> 767

<211> 431

<212> DNA

<213> Homo sapiens

<400> 767

gctagctcgc tcgcactcat tctcgggagg cttccccgcg ccggccgcgt cccgcccgt
 60
 ccccggcacc agaagttcct ctgcgcgtcc gacggcgaca tgggcgtccc cacggccccg
 120
 gaggccggca gctggcgctg gggatccctg ctcttcgctc tcttctggc tgcgtcccta
 180
 ggtccgggtg cagccttcaa ggtcgccacg ccgtattccc tgtatgtctg tcccgagggg
 240
 cagaacgtca ccctcacctg caggctcttg ggccctgtgg acaaagggca cgatgtgacc
 300
 ttctacaaga cgtggtaccg cagctcgagg ggcgaggtgc agacctgctc agagcgccgg
 360
 cccatccgca acctcacgtt ccaggacctt cacctgcacc atggaggcca ccaggctgcc
 420
 aacaccagcc a
 431

<210> 768
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 768
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 1 5 10 15
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 20 25 30
 Phe Lys Val Ala Thr Pro Tyr Ser Leu Tyr Val Cys Pro Glu Gly Gln
 35 40 45
 Asn Val Thr Leu Thr Cys Arg Leu Leu Gly Pro Val Asp Lys Gly His
 50 55 60
 Asp Val Thr Phe Tyr Lys Thr Trp Tyr Arg Ser Ser Arg Gly Glu Val
 65 70 75 80
 Gln Thr Cys Ser Glu Arg Arg Pro Ile Arg Asn Leu Thr Phe Gln Asp
 85 90 95
 Leu His Leu His His Gly Gly His Gln Ala Ala Asn Thr Ser
 100 105 110

<210> 769
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 769
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 cgacttcgaa ctccatcaag tgatttttgc ggtcgacgaa tctggtttcc gatatgaaaga
 120
 acggtatggt ttgtatgtcg cggccctgcc actcaaacct caccgtgtca cccacctcaa
 180
 aaaaatcccc ggtcggccca caaataaatc aattgcgccg ctctccgag ttcttccatg
 240
 tcaacgatct cccctggctg ctcaagccaa ggccctcgcg gccgtgggac tccaagggtg
 300
 acgttgaccc gactgatttc ggaccagttg gcgtcggtat tgggggcagg gtagttaccg
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 420
 an
 422

<210> 770
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 770
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 1 5 10 15
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[illegible]

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<210> 771
<211> 369
<212> DNA
<213> Homo sapiens
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180
gccagggcca tgggtgtcga tgtcagtcaa atgacagcag aacagggcgc acagggcgtgt
240
atcgcagaga ttcgctctct ggcacgtcag gtgaatatcc cgggtgggatt gcgtgacctc
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360
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369
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<210> 772
<211> 123
<212> PRT
<213> Homo sapiens
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<400> 772
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 1          5          10          15
Gly Tyr Val His Ala Met Ala His Gln Leu Gly Gly Phe Tyr Asp Leu
          20          25          30
Pro His Gly Val Cys Asn Ala Ile Leu Leu Pro His Val Gln Thr Phe
          35          40          45
Asn Cys Lys Val Ala Ala Ser Arg Leu Arg Asp Cys Ala Gln Ala Met
          50          55          60
Gly Val Asp Val Ser Gln Met Thr Ala Glu Gln Gly Ala Gln Ala Cys
65          70          75          80
Ile Ala Glu Ile Arg Ser Leu Ala Arg Gln Val Asn Ile Pro Val Gly
          85          90          95
Leu Arg Asp Leu Asn Val Lys Glu Ala Asp Phe Pro Ile Leu Ala Thr
          100          105          110
Asn Ala Leu Lys Asp Pro Val Gly Leu Ile Asn

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115

120

<210> 773
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 773
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 120
 tccgggttcct gccgggattc ggcggtggtg ctggtgcaac tgctgcgcaa cctggggcctg
 180
 gcggcgcgat ttgtgtctgg ctatctgac caactgaccg ccgacgtcaa agccctcgac
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 300
 cccggcgcc
 309

<210> 774
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 774
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 1 5 10 15
 Ala Ala Asp Ile Gly Tyr Leu Ile Arg Val Glu Pro Gly Val Gln Thr
 20 25 30
 Pro Glu Phe Thr Leu Glu Asn Ala Ser Gly Ser Cys Arg Asp Ser Ala
 35 40 45
 Trp Leu Leu Val Gln Leu Leu Arg Asn Leu Gly Leu Ala Ala Arg Phe
 50 55 60
 Val Ser Gly Tyr Leu Ile Gln Leu Thr Ala Asp Val Lys Ala Leu Asp
 65 70 75 80
 Gly Pro Ser Gly Thr Glu Val Asp Phe Thr Asp Leu His Ala Trp Cys
 85 90 95
 Glu Val Tyr Leu Pro Gly Ala
 100

<210> 775
 <211> 4125
 <212> DNA
 <213> Homo sapiens

<400> 775
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 120
 gctaccagcg aagactccga cctgagcatg cgcacactga gcacgcccag cccagccctg
 180

atatgtccac cgaatctccc aggatttcag aatggaagg gctcgtccac ctccctgtcc
240
tccatcaccg gggagacggg ggccatgggt cactccccgc ccccgaccgc cctcacacac
300
ccgctcatcc ggctcgctc cagaccccag aaggatcagg ccagcataga ccggctcccg
360
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420
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480
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540
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660
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720
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780
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1620
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1680
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1740
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1800

gccctttccc tcgcacacag gccccacccc cacagttcca cgcccccccc ccaaggccac
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1920
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1980
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2760
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<210> 776

<211> 483

<212> PRT

<213> Homo sapiens

<400> 776

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Ser	Ser	Thr	Asp	His	Thr	Pro	Thr	Lys	Ala	Gln	Lys	Asn	Val	Ala	Thr
			20					25					30		
Ser	Glu	Asp	Ser	Asp	Leu	Ser	Met	Arg	Thr	Leu	Ser	Thr	Pro	Ser	Pro
			35				40					45			
Ala	Leu	Ile	Cys	Pro	Pro	Asn	Leu	Pro	Gly	Phe	Gln	Asn	Gly	Arg	Gly
	50					55					60				
Ser	Ser	Thr	Ser	Ser	Ser	Ser	Ile	Thr	Gly	Glu	Thr	Val	Ala	Met	Val
65					70					75				80	
His	Ser	Pro	Pro	Pro	Thr	Arg	Leu	Thr	His	Pro	Leu	Ile	Arg	Leu	Ala
				85					90					95	
Ser	Arg	Pro	Gln	Lys	Asp	Gln	Ala	Ser	Ile	Asp	Arg	Leu	Pro	Asp	His
			100					105					110		
Ser	Met	Val	Gln	Ile	Phe	Ser	Phe	Leu	Pro	Thr	Asn	Gln	Leu	Cys	Arg
			115				120					125			
Cys	Ala	Arg	Val	Cys	Arg	Arg	Trp	Tyr	Asn	Leu	Ala	Trp	Asp	Pro	Arg
	130					135					140				
Leu	Trp	Arg	Thr	Ile	Arg	Leu	Thr	Gly	Glu	Thr	Ile	Asn	Val	Asp	Arg
145					150					155				160	
Ala	Leu	Lys	Val	Leu	Thr	Arg	Arg	Leu	Cys	Gln	Asp	Thr	Pro	Asn	Val
			165					170						175	
Cys	Leu	Met	Leu	Glu	Thr	Val	Thr	Val	Ser	Gly	Cys	Arg	Arg	Leu	Thr

180																185																190															
Asp	Arg	Gly	Leu	Tyr	Thr	Ile	Ala	Gln	Cys	Cys	Pro	Glu	Leu	Arg	Arg	Asp	Arg	Gly	Leu	Tyr	Thr	Ile	Ala	Gln	Cys	Cys	Pro	Glu	Leu	Arg	Arg	Asp	Arg	Gly	Leu	Tyr	Thr	Ile	Ala	Gln	Cys	Cys	Pro	Glu	Leu	Arg	Arg
195																200																205															
Leu	Glu	Val	Ser	Gly	Cys	Tyr	Asn	Ile	Ser	Asn	Glu	Ala	Val	Phe	Asp	Leu	Glu	Val	Ser	Gly	Cys	Tyr	Asn	Ile	Ser	Asn	Glu	Ala	Val	Phe	Asp	Leu	Glu	Val	Ser	Gly	Cys	Tyr	Asn	Ile	Ser	Asn	Glu	Ala	Val	Phe	Asp
210																215																220															
Val	Val	Ser	Leu	Cys	Pro	Asn	Leu	Glu	His	Leu	Asp	Val	Ser	Gly	Cys	Val	Val	Ser	Leu	Cys	Pro	Asn	Leu	Glu	His	Leu	Asp	Val	Ser	Gly	Cys	Val	Val	Ser	Leu	Cys	Pro	Asn	Leu	Glu	His	Leu	Asp	Val	Ser	Gly	Cys
225																230																235															
Ser	Lys	Val	Thr	Cys	Ile	Ser	Leu	Thr	Arg	Glu	Ala	Ser	Ile	Lys	Leu	Ser	Lys	Val	Thr	Cys	Ile	Ser	Leu	Thr	Arg	Glu	Ala	Ser	Ile	Lys	Leu	Ser	Lys	Val	Thr	Cys	Ile	Ser	Leu	Thr	Arg	Glu	Ala	Ser	Ile	Lys	Leu
245																250																255															
Ser	Pro	Leu	His	Gly	Lys	Gln	Ile	Ser	Ile	Arg	Tyr	Leu	Asp	Met	Thr	Ser	Pro	Leu	His	Gly	Lys	Gln	Ile	Ser	Ile	Arg	Tyr	Leu	Asp	Met	Thr	Ser	Pro	Leu	His	Gly	Lys	Gln	Ile	Ser	Ile	Arg	Tyr	Leu	Asp	Met	Thr
260																265																270															
Asp	Cys	Phe	Val	Leu	Glu	Asp	Glu	Gly	Leu	His	Thr	Ile	Ala	Ala	His	Asp	Cys	Phe	Val	Leu	Glu	Asp	Glu	Gly	Leu	His	Thr	Ile	Ala	Ala	His	Asp	Cys	Phe	Val	Leu	Glu	Asp	Glu	Gly	Leu	His	Thr	Ile	Ala	Ala	His
275																280																285															
Cys	Thr	Gln	Leu	Thr	His	Leu	Tyr	Leu	Arg	Arg	Cys	Val	Arg	Leu	Thr	Cys	Thr	Gln	Leu	Thr	His	Leu	Tyr	Leu	Arg	Arg	Cys	Val	Arg	Leu	Thr	Cys	Thr	Gln	Leu	Thr	His	Leu	Tyr	Leu	Arg	Arg	Cys	Val	Arg	Leu	Thr
290																295																300															
Asp	Glu	Gly	Leu	Arg	Tyr	Leu	Val	Ile	Tyr	Cys	Ala	Ser	Ile	Lys	Glu	Asp	Glu	Gly	Leu	Arg	Tyr	Leu	Val	Ile	Tyr	Cys	Ala	Ser	Ile	Lys	Glu	Asp	Glu	Gly	Leu	Arg	Tyr	Leu	Val	Ile	Tyr	Cys	Ala	Ser	Ile	Lys	Glu
305																310																315															
Leu	Ser	Val	Ser	Asp	Cys	Arg	Phe	Val	Ser	Asp	Phe	Gly	Leu	Arg	Glu	Leu	Ser	Val	Ser	Asp	Cys	Arg	Phe	Val	Ser	Asp	Phe	Gly	Leu	Arg	Glu	Leu	Ser	Val	Ser	Asp	Cys	Arg	Phe	Val	Ser	Asp	Phe	Gly	Leu	Arg	Glu
325																330																335															
Ile	Ala	Lys	Leu	Glu	Ser	Arg	Leu	Arg	Tyr	Leu	Ser	Ile	Ala	His	Cys	Ile	Ala	Lys	Leu	Glu	Ser	Arg	Leu	Arg	Tyr	Leu	Ser	Ile	Ala	His	Cys	Ile	Ala	Lys	Leu	Glu	Ser	Arg	Leu	Arg	Tyr	Leu	Ser	Ile	Ala	His	Cys
340																345																350															
Gly	Arg	Val	Thr	Asp	Val	Gly	Ile	Arg	Tyr	Val	Ala	Lys	Tyr	Cys	Ser	Gly	Arg	Val	Thr	Asp	Val	Gly	Ile	Arg	Tyr	Val	Ala	Lys	Tyr	Cys	Ser	Gly	Arg	Val	Thr	Asp	Val	Gly	Ile	Arg	Tyr	Val	Ala	Lys	Tyr	Cys	Ser
355																360																365															
Lys	Leu	Arg	Tyr	Leu	Asn	Ala	Arg	Gly	Cys	Glu	Gly	Ile	Thr	Asp	His	Lys	Leu	Arg																													

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<210> 777
<211> 705
<212> DNA
<213> Homo sapiens
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120
gtggcttcaa ggaaaaacaa aaacctcttc tctcattcac cacctctagg ccaggagaaa
180
ttatttttgg ttcaggcttt cacagtgggg gtctgaaagt gaccagtcta gaaaaggatg
240
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 360
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 420
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 480
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 600
 aacactttct ttttcctttt ggcgttaaag tctgccttct ccgcgccgcc gtcccagtgg
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 705

<210> 778

<211> 134

<212> PRT

<213> Homo sapiens

<400> 778

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			20					25					30		
Leu	Glu	Ile	His	Gln	Ala	Leu	Asn	Ser	Asp	Pro	Thr	Asp	Val	Ala	Ala
		35					40					45			
Leu	Arg	Arg	Met	Ala	Ile	Ser	Glu	Gly	Gly	Leu	Leu	Thr	Asp	Glu	Ile
	50					55					60				
Arg	Arg	Lys	Val	Trp	Pro	Lys	Leu	Leu	Asn	Val	Asn	Ala	Asn	Asp	Pro
65					70					75				80	
Pro	Pro	Ile	Ser	Gly	Lys	Asn	Leu	Arg	Gln	Met	Ser	Lys	Asp	Tyr	Gln
			85						90					95	
Gln	Val	Leu	Leu	Asp	Val	Arg	Arg	Ser	Leu	Arg	Arg	Phe	Pro	Pro	Gly
			100						105				110		
Glu	Lys	Leu	Ser	Arg	Ser	Cys	His	Ile	Trp	Glu	Glu	Arg	Ile	Cys	Phe
		115					120						125		
Arg	Ser	Tyr	His	Val	Thr										
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<210> 779

<211> 322

<212> DNA

<213> Homo sapiens

<400> 779

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 120
 cgccttgcct ttgaaggaac ccagtgggaa ggctagacca agtaaatatg aatcaccaaa
 180

cgccagcaac ttcacgtca ggcacgtggc aactggcaaa gagggcactg atgatgagta
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 300
 ggaaatgata gggttggcta cc
 322

<210> 780
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 780
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 20 25 30
 Val Arg Ser Pro Arg Asn Ala Leu Pro Leu Lys Glu Pro Ser Gly Lys
 35 40 45
 Ala Arg Pro Ser Lys Tyr Glu Ser Pro Asn Ala Ser Asn Phe Ile Val
 50 55 60
 Arg His Val Ala Thr Gly Lys Glu Gly Thr Asp Asp Glu Tyr Ala Asn
 65 70 75 80
 Ser Asn Tyr Tyr Tyr Ser Met Ser Ala Asn Arg Leu Gly Asp Glu Glu
 85 90 95
 Thr Glu Glu Met Ile Gly Leu Ala Thr
 100 105

<210> 781
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 781
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 120
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 180
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 297

<210> 782
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 782
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 Cys Met Glu Cys Val Cys Met Xaa Ile Cys Val Cys Met Xaa Met Cys


```

      20      25      30
Val Cys Val Trp Asn Val Cys Met Glu Cys Val Ser Val Tyr Gly Ile
      35      40      45
Cys Val Ser Met Xaa Met Cys Val Cys Val Trp Asn Val Ser Asn Val
      50      55      60
Cys Leu Cys Val Arg Asn Val Cys Val Trp Asn Val Phe Thr Cys Met
65      70      75      80
Cys Leu Glu Cys Val Cys Met Glu Cys Val Cys Met Cys Met Xaa Met
      85      90      95
Cys Val Cys

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<210> 783
 <211> 612
 <212> DNA
 <213> Homo sapiens

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<400> 783
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60
caccgggtcg agtgagctgc ccagcagcaa gcccaccaca tcggtgacca gaccgatcac
120
tttgttgagc acgtcgatga cgggcaactt caaggaaatc caggtgcgga cttgcgcggt
180
ccgcacaaaa atcggctggg tgcgatcaa ctgcgggttg ccaatcgag aatttgcgcg
240
gttcgatgac acgtgtcttc accgtgatat tcagcagccc cagtacgtcc accggcaact
300
cgacggccac cgcgctggct ttgttggaaca gctgcacaaa gccctgaatc aggttgaaca
360
gttgacaggtt gacgtccagg gcgctcttgt ccgtgccgtt ttgtatattg atcaggtcgc
420
ccaggtgcag gatctgcgtg cctggggcaa tcagcttgat tgcttcgagg ttattgatca
480
ccacctggac cgcattaccg cccagcttga gcacatcgat ggcggcctgg atcaactggc
540
cgacggtcgc gtcggtcttg agcaactggc cgtagttgcc ggcgctgacg ttgaggcgga
600
tggccgacgc gt
612

```

<210> 784
 <211> 190
 <212> PRT
 <213> Homo sapiens

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<400> 784
Met Ser Ile Cys Val Pro Gly Thr Gly Ser Ser Glu Leu Pro Ser Ser
1      5      10      15
Lys Pro Thr Thr Ser Val Thr Arg Pro Ile Thr Leu Leu Ser Thr Ser
      20      25      30
Met Thr Gly Asn Phe Lys Glu Ile Gln Val Arg Thr Cys Ala Val Arg
      35      40      45
Thr Lys Ile Gly Trp Val Ser Ile Asn Cys Gly Leu Pro Ile Ala Glu

```

50		55		60											
Phe	Ala	Arg	Phe	Asp	Asp	Thr	Cys	Leu	His	Arg	Asp	Ile	Gln	Gln	Pro
65				70						75					80
Gln	Tyr	Val	His	Arg	Gln	Leu	Asp	Gly	His	Arg	Ala	Gly	Phe	Val	Gly
			85						90					95	
Gln	Leu	His	Lys	Ala	Leu	Asn	Gln	Val	Glu	Gln	Leu	Gln	Val	Asp	Val
			100					105					110		
Gln	Gly	Ala	Leu	Val	Arg	Ala	Val	Leu	Tyr	Ile	Asp	Gln	Val	Ala	Gln
		115					120					125			
Val	Gln	Asp	Leu	Arg	Ala	Trp	Gly	Asn	Gln	Leu	Asp	Cys	Phe	Glu	Val
	130					135					140				
Ile	Asp	His	His	Leu	Asp	Arg	Ile	Thr	Ala	Gln	Leu	Glu	His	Ile	Asp
145				150						155					160
Gly	Gly	Leu	Asp	Gln	Leu	Ala	Asp	Gly	Arg	Val	Gly	Leu	Glu	Gln	Leu
			165					170						175	
Val	Val	Val	Ala	Gly	Ala	Asp	Val	Glu	Ala	Asp	Gly	Arg	Arg		
		180						185					190		

<210> 785

<211> 408

<212> DNA

<213> Homo sapiens

<400> 785

accttggaact acttcactat cgaccctcgg ctaggcgacg acgatgactt cgatcacctg
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cttcaggccg cccacgctcg tggctgtgca gtactgctcg acgggggtgg caaccacgctc
120
tcgcgctcgca accgcacgtg gcaggatgcg cagagtgtcg ggccagattc agacgccggc
180
cgtatggttc gctggtgtga ggggcgcctc gacgttttcg agggatcatag tgacctggtc
240
gcactcaacc acgacaaccc cgcagtgcgg gaacatgtca cccggatcat gaactattgg
300
tgcggtcgcg gtggtgacgg ctggcggtcg gacgccgcta ttccgtcaat cctgagtctt
360
gggctgcggg gctgcctccg gtgcgagaga agcgccctga cgtgagga
408

<210> 786

<211> 134

<212> PRT

<213> Homo sapiens

<400> 786

Thr	Leu	Asp	Tyr	Phe	Thr	Ile	Asp	Pro	Arg	Leu	Gly	Asp	Asp	Asp	Asp
1				5				10					15		
Phe	Asp	His	Leu	Leu	Gln	Ala	Ala	His	Ala	Arg	Gly	Leu	Ser	Val	Leu
			20					25					30		
Leu	Asp	Gly	Val	Val	Asn	His	Val	Ser	Arg	Arg	Asn	Arg	Ile	Val	Gln
	35					40					45				
Asp	Ala	Gln	Ser	Ala	Gly	Pro	Asp	Ser	Asp	Ala	Gly	Arg	Met	Val	Arg
	50					55					60				
Trp	Cys	Glu	Gly	Arg	Leu	Asp	Val	Phe	Glu	Gly	His	Ser	Asp	Leu	Val

[illegible]

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<210> 787
<211> 310
<212> DNA
<213> Homo sapiens
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<400> 787
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60
gttggaaacca cagacgatgc cacgcttgtg tcagcagtgc gacactggcc cacgtggcgt
120
ccttggtctc tcctcattgc tgccgtcact gtgtgctggg catgccctgc agttacccca
180
aagctttatg tcacaacatt gaggctggcg gagaaagacc ggccccttca cccacctta
240
gacttcctgg aagggccgcc cgggtccaca acctggcccc ttaactccct gggcagctgc
300
tggggggagaa
310
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```
<210> 788
<211> 90
<212> PRT
<213> Homo sapiens
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```

<400> 788
Met Met Leu Val Ala Asp Thr Val Gly Thr Thr Asp Asp Ala Thr Leu
 1          5          10          15
Val Ser Ala Val Arg His Trp Pro Thr Trp Arg Pro Trp Ser Leu Leu
      20          25          30
Ile Ala Ala Val Thr Val Cys Trp Ala Cys Pro Ala Val Thr Pro Lys
      35          40          45
Leu Tyr Val Thr Thr Leu Arg Leu Ala Glu Lys Asp Arg Pro Leu His
      50          55          60
Pro Thr Leu Asp Phe Leu Glu Gly Pro Pro Gly Ser Thr Thr Trp Pro
65          70          75          80
Val Asn Ser Leu Gly Ser Cys Trp Gly Arg
      85          90

```

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<210> 789
<211> 369
<212> DNA
<213> Homo sapiens
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<400> 789

acgcgtgaag ttgcagcagc aagcaatctg cctcgcttct ggtgcccacc gaaaccaagg
60
tctgccagac agcagcgctg ggacctctcc cctccccagc aggatgggccc ggctctggaa
120
gcacgaggtg ttccaaagtg caaacaagct gctgttaaata aattattccc aaacgcaaaa
180
gcccttgctg gtttgcttgc ttgctttttt ctttttttgc ctgcacaga tategctagg
240
gcagagtatt gacatttcgt tttctttttg ttatgggtga taaagcacgg tgtttcttgt
300
gagtgtatgc ctgtatttcc ctgcagagct gattgccagt ccattttctt ctatcccatc
360
cccatttttc
369

<210> 790

<211> 114

<212> PRT

<213> Homo sapiens

<400> 790

Met	Asp	Trp	Gln	Ser	Ala	Leu	Gln	Gly	Asn	Thr	Gly	Ile	His	Ser	Gln
1				5				10						15	
Glu	Thr	Pro	Cys	Phe	Ile	Thr	His	Asn	Lys	Lys	Lys	Thr	Lys	Cys	Gln
			20					25					30		
Tyr	Ser	Ala	Leu	Ala	Ile	Ser	Val	Arg	Gly	Lys	Lys	Arg	Lys	Lys	Gln
			35				40					45			
Ala	Ser	Lys	Pro	Ala	Arg	Ala	Leu	Ala	Phe	Gly	Asn	Asn	Tyr	Leu	Thr
			50				55				60				
Ala	Ala	Cys	Leu	His	Phe	Gly	Thr	Pro	Arg	Ala	Ser	Arg	Ala	Gly	Pro
65					70				75					80	
Ser	Cys	Trp	Gly	Gly	Glu	Arg	Ser	Gln	Arg	Cys	Cys	Leu	Ala	Asp	Leu
			85					90						95	
Gly	Phe	Gly	Gly	His	Gln	Lys	Arg	Gly	Arg	Leu	Leu	Ala	Ala	Ala	Thr
			100					105						110	
Ser	Arg														

<210> 791

<211> 420

<212> DNA

<213> Homo sapiens

<400> 791

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120
agaatcaaaa tggaaagagt gggtaatgtg tgttcactgg aaatttctaa cattcaaaaa
180
ggagaagggg gagagtacat gtgtcatgct gtaaacaatca taggggaagc aaagagcttt
240
gcaaatgtag acataatgcc ccaggaagaa agagtgggtg cactaccacc tccagtaaca
300

catcagcatg tcatggagtt tgatttggaa cacaccacat catcaagaac accttctcct
360
caagaaattg tcctggaagt tgaattaagt gaaaaagacg ttaaagaatt tgagaagcag
420

<210> 792
<211> 138
<212> PRT
<213> Homo sapiens

<400> 792
Thr Lys Arg Lys Val Tyr Glu Asn Thr Thr Leu Gly Phe Ile Val Glu
1 5 10 15
Val Glu Gly Leu Pro Val Pro Gly Val Lys Trp Tyr Arg Asn Lys Ser
20 25 30
Leu Leu Glu Pro Asp Glu Arg Ile Lys Met Glu Arg Val Gly Asn Val
35 40 45
Cys Ser Leu Glu Ile Ser Asn Ile Gln Lys Gly Glu Gly Gly Glu Tyr
50 55 60
Met Cys His Ala Val Asn Ile Ile Gly Glu Ala Lys Ser Phe Ala Asn
65 70 75 80
Val Asp Ile Met Pro Gln Glu Glu Arg Val Val Ala Leu Pro Pro Pro
85 90 95
Val Thr His Gln His Val Met Glu Phe Asp Leu Glu His Thr Thr Ser
100 105 110
Ser Arg Thr Pro Ser Pro Gln Glu Ile Val Leu Glu Val Glu Leu Ser
115 120 125
Glu Lys Asp Val Lys Glu Phe Glu Lys Gln
130 135

<210> 793
<211> 479
<212> DNA
<213> Homo sapiens

<400> 793
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ccgcgaacag tactgcgaggga acccaaacga tcatttttaa cccagacgt ccctgaacca
120
aagccaaagt ctacaggtca ctggggcaga ggccgcccga aaccagcttc ccctcccggc
180
ctaggcgcg caggtccccg cccagccggg gcgacccctt ggtcggacag tgaggttggg
240
agcccaccgc acccaagtcc gccgcattcca cccggcgag ggcacccccg acgggcagcc
300
gtcaccttc tcctggcccc ggcttcagga aaactgcctg gaggtggccg gggttcccta
360
gcgaggctg ggcgggggg ttcgcgcctg cctcagtctc cccatccgtg gcccggggga
420
tgagccccg tgcgcgcaga ggctgcggca ggtcccagcc aggtgccctg gaacgtgga
479

<210> 794

<211> 159

<212> PRT

<213> Homo sapiens

<400> 794

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Xaa Ala Cys Arg Phe Ser Glu Ile His Tyr Gly Asn Val Arg Val Val
 1           5           10           15
Glu Met Leu Arg Pro Arg Thr Val Leu Arg Glu Pro Lys Arg Ser Phe
      20           25           30
Leu Thr Pro Asp Val Pro Glu Pro Lys Pro Lys Ser Thr Gly His Trp
      35           40           45
Gly Arg Gly Arg Pro Lys Pro Ala Ser Pro Pro Gly Leu Gly Ala Pro
      50           55           60
Gly Pro Arg Pro Ala Gly Ala Ile Leu Trp Ser Asp Ser Glu Val Gly
      65           70           75           80
Ser Pro Pro His Pro Ser Pro Pro His Pro Pro Gly Ala Gly Asp Pro
      85           90           95
Arg Arg Ala Ala Ala His Leu Leu Leu Ala Pro Ala Ser Gly Lys Leu
      100          105          110
Pro Gly Gly Gly Arg Gly Ser Leu Ala Glu Ala Gly Arg Arg Ala Ser
      115          120          125
Arg Leu Pro Gln Ser Pro His Pro Trp Pro Gly Gly Trp Ser Pro Leu
      130          135          140
Arg Ala Glu Ala Ala Ala Gly Pro Ser Gln Val Pro Trp Asn Val
      145          150          155

```

<210> 795

<211> 1418

<212> DNA

<213> Homo sapiens

<400> 795

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gccggcggcg gggaggccgg ggcctgcagg cccccggtac gacaagatcc ggactccggc
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ccggactacg aggcgctgcc ggctggagcc actgtcacca cgcacatggt ggcaggcgcc
120
gtggcagggg tcttgagca ctgcgtgatg taccatcg actgcgtcaa gaccgggatg
180
cagagtctac agcctgaccc agctgcccgc tategcaatg tggtggaggg cctctggagg
240
attataagaa cggagggcct atggaggccc atgagggggc tgaacgtcac agcaacaggc
300
gcagggcctg cccacgccct ttattttgcc tgctacgaaa agttaaaaaa gacattgagt
360
gatgtaatcc accctggggg caatagccat attgccaatg gtgcggccgg gtgtgtggca
420
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480
tgaatctgga tactctccat caccggttgg ctgctgtcac catttccttc ctggttgatg
540
gcactactag tggtaagca gaggatgcag atgtacaact caccatacca ccgggtgaca
600
gactgtgtac gggcagtgtg gcaaaatgaa ggggcccggg ccttttaccg cagctacacc
660

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acccagctga ccatgaacgt tcctttccaa gccattcact tcatgaccta tgaattcctg
 720
 caggagcact ttaacccccca gagacggtac aacccaagct cccacgtcct ctctggagct
 780
 tgcgcaggag ctgtagctgc cgcagccaca accccactgg acgtttgcaa aacactgctc
 840
 aacacccagg agtccttggc tttgaactca cacattacag gacatatcac aggcattggct
 900
 agtgcccttca ggacggtata tcaagtaggt ggggtgaccg cctatttccg aggggtgcag
 960
 gccagagtaa ttaccagat cccctccaca gccatcgcat ggtctgtgta tgagttcttc
 1020
 aaatacctaa tcactaaaag gcaagaagag tggagggctg gcaagtgaag tagcactgaa
 1080
 cgaagccagg ggttcagatg aactgctgc atcctgggtca cattctctgt ctctggaat
 1140
 gctccacct caagtggagt tagaaggaag gtagaggggc tctccccag gattttggtg
 1200
 ttttgactaa caccagttcc tgccaacctc tgttgccacc acctttcctt ccaggcccta
 1260
 agcagtgca gcaaagcaca ccacagcacc tttgataacc tctctccatc ctgggcctga
 1320
 tgacctgctc tagactgtta tagagggata agcagctcat tcccctgggt cctaataaaa
 1380
 agccttttaa ttaaaaaaaaa aaaaaaaaaa aaaaaaaaa
 1418

<210> 796

<211> 176

<212> PRT

<213> Homo sapiens

<400> 796

Met	Ala	Leu	Leu	Val	Val	Lys	Gln	Arg	Met	Gln	Met	Tyr	Asn	Ser	Pro
1				5					10					15	
Tyr	His	Arg	Val	Thr	Asp	Cys	Val	Arg	Ala	Val	Trp	Gln	Asn	Glu	Gly
			20						25					30	
Ala	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Val
			35						40				45		
Pro	Phe	Gln	Ala	Ile	His	Phe	Met	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	His
			50				55					60			
Phe	Asn	Pro	Gln	Arg	Arg	Tyr	Asn	Pro	Ser	Ser	His	Val	Leu	Ser	Gly
65					70					75					80
Ala	Cys	Ala	Gly	Ala	Val	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val
				85					90					95	
Cys	Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Ser	Leu	Ala	Leu	Asn	Ser	His
			100					105					110		
Ile	Thr	Gly	His	Ile	Thr	Gly	Met	Ala	Ser	Ala	Phe	Arg	Thr	Val	Tyr
		115					120					125			
Gln	Val	Gly	Gly	Val	Thr	Ala	Tyr	Phe	Arg	Gly	Val	Gln	Ala	Arg	Val
		130				135					140				
Ile	Tyr	Gln	Ile	Pro	Ser	Thr	Ala	Ile	Ala	Trp	Ser	Val	Tyr	Glu	Phe
145				150					155						160
Phe	Lys	Tyr	Leu	Ile	Thr	Lys	Arg	Gln	Glu	Glu	Trp	Arg	Ala	Gly	Lys

165

170

175

<210> 797

<211> 585

<212> DNA

<213> Homo sapiens

<400> 797

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 120
 gagatgctgc cggaagttaa gtcgtcttca gaaatctacg gccgcaccaa aagcgggtatc
 180
 gctatcggcg gcatcgcggg cgaccaacag gctgctctgt tcggccagat gtgctggaa
 240
 gccgggcagg ccaagaacac ttatggcacc ggctgcttcc tgctgatgaa caccggcgac
 300
 aaagccgtca aatccaaaca cggcatgctc accaccatcg cctgcggtcc acgcggcgaa
 360
 gtggcttatg cgctggaagg cgcggtgttc aacggtgggt cccccgtgca gtggctgcgt
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 480
 gacagcaacg gcgtctacct ggtgccggcc ttaccggcc tgggcgctcc gtactgggac
 540
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 585

<210> 798

<211> 195

<212> PRT

<213> Homo sapiens

<400> 798

Lys Phe Thr Gly Gly Lys Thr His Val Thr Asp Tyr Thr Asn Ala Ser
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 20 25 30
 Leu Glu Ile Leu Asp Val Pro Arg Glu Met Leu Pro Glu Val Lys Ser
 35 40 45
 Ser Ser Glu Ile Tyr Gly Arg Thr Lys Ser Gly Ile Ala Ile Gly Gly
 50 55 60
 Ile Ala Gly Asp Gln Gln Ala Ala Leu Phe Gly Gln Met Cys Val Glu
 65 70 75 80
 Ala Gly Gln Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Leu Leu Met
 85 90 95
 Asn Thr Gly Asp Lys Ala Val Lys Ser Lys His Gly Met Leu Thr Thr
 100 105 110
 Ile Ala Cys Gly Pro Arg Gly Glu Val Ala Tyr Ala Leu Glu Gly Ala
 115 120 125
 Val Phe Asn Gly Gly Ser Pro Val Gln Trp Leu Arg Asp Glu Leu Lys
 130 135 140
 Ile Ile Ala Asp Ala Thr Asp Thr Glu Tyr Phe Ala Gly Lys Val Lys

145		150		155		160									
Asp	Ser	Asn	Gly	Val	Tyr	Leu	Val	Pro	Ala	Phe	Thr	Gly	Leu	Gly	Ala
			165						170					175	
Pro	Tyr	Trp	Asp	Pro	Tyr	Ala	Arg	Gly	Ala	Leu	Phe	Gly	Leu	Thr	Arg
			180					185					190		
Gly	Val	Arg													
		195													

<210> 799

<211> 2152

<212> DNA

<213> Homo sapiens

<400> 799

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120
acgccgagag cccagaccag gattccaaac aactgcacg agaattattgt ggatccgctg
180
tcaggtaagt gtccgtcact gaccagacg ctgttacgtg gcacatgact gtacagtgcc
240
acgtaacagc actgtacttt tctcccataa acagttacct gccatgtatc tacatgattc
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360
ctttgatgtt gtaacgacaa catagcatca ctttacgaca gaatcatctg gaaaaacaga
420
acaacgaata catacatctt aaaaaatgct ggggtggggc aggcacagct cagcctgta
480
atcccagcac tttgggaggc tgaggcgggt ggatcacgta atcccagcac tttgaggggc
540
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600
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660
ctacttggga ggctgaggca ggagaatcgc ttgaaccag gagacacagg ctgcagtgac
720
tcgagatcac gccactgcac tccagcctgg cgacagagcg agactccatc tcaaaaaaaaa
780
aaaccaacaa aaaaactggg gtgaaaatct aacggataat tcagcattgc cgcatagaaa
840
cctccgcaaa accggccaaa caaacgcgga caggcggccc tggcgtcagc gcacgacagt
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960
ttccagatcc accaccgga cctgctccac caccagaagg gagggcccgt cctttccagc
1020
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1080
gagtgatcct tcctctttat tttctaaagt gtacttttcc atttctgcca ttttcagaat
1140
gagggcatcc atgacatcct tgcaaatctg cagactggtg gcacttggtta cttccaaaaa
1200

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caaatcagaa gtcgttttct taacctttgt cttctcactg ttggttattg gtgggaagga
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 aatcacatca ccgtctgcat ccacaagaca cgggtaattt tcatttccat ccagcaagtg
 1320
 aaggtatctg tgcaggcccg acacactctg ccgcttcttc tgcttctct gctcctcggc
 1380
 ctccagctgc agctgccgca ccagctcctt ggccttggtc tctttccgcc ccaaggggac
 1440
 aatcttgagg tcctgtgggg gccgggagca gtacagcagg ggccctttga cggcacggag
 1500
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 1620
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 1680
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 1740
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 1860
 gcgcaggtac tccaggatgg atctggtctg gcagccgtg accatcttct ccaggcgctt
 1920
 gtccctcagc ttgttcccac ggaaattgat ctcttgagc ttggggcagt ccgcaagctc
 1980
 tgcaggatc tcgctcagct ggttggtcga gaggtccaac gtcttgagcg aggccagggtg
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<210> 800

<211> 95

<212> PRT

<213> Homo sapiens

<400> 800

Cys	Cys	Asn	Asp	Asn	Ile	Ala	Ser	Leu	Tyr	Asp	Arg	Ile	Ile	Trp	Lys
1				5					10					15	
Asn	Arg	Thr	Thr	Asn	Thr	Tyr	Ile	Leu	Lys	Asn	Ala	Gly	Val	Gly	Gln
			20					25					30		
Ala	Gln	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly
		35					40				45				
Gly	Ser	Arg	Asn	Pro	Ser	Thr	Leu	Arg	Gly	Arg	Gly	Gly	Gln	Ile	Met
	50					55				60					
Arg	Ser	Arg	Asp	Gln	Asp	His	Pro	Gly	Gln	Asn	Gly	Glu	Thr	Pro	Ser
65				70				75						80	
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<211> 424

<212> DNA

<213> Homo sapiens

<400> 801

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<213> Homo sapiens

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Glu	Ser	Tyr	Lys	Gly	Arg	Glu	Phe	Ala	Gln	Leu	Val	Ala	Val	Leu	Thr
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<210> 804

<211> 1400

<212> PRT

<213> Homo sapiens

<400> 804

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Glu	Arg	Ile	Leu	Ala	Ala	Ala	Phe	Pro	Ala	Arg	Pro	Asp	Glu	Gln	Arg
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Gly Pro Gln Gln Leu Cys Ile Ser Leu Glu Pro Ala Leu Leu Leu Lys		335
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Gly Asp Val Met Val Thr Cys Tyr His Lys Gly Gly Arg Gly Thr Asp		350
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Arg Thr Leu Val Phe Arg Val Gln Phe His Thr Cys Thr Ile His Gly		365
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Pro Gln Leu Thr Phe Pro Lys Asp Gln Leu Asp Glu Ala Trp Thr Asp		380
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Pro Glu Lys Ile Lys Gly Ser Thr Pro Arg Asn Asp Pro Ser Val Ser		415
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Thr Arg Gly Pro Leu Asp Gly Ser Pro Tyr Ala Gln Val Gln Arg Pro		460
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Pro Gly Leu Ser Arg His Cys Ser Cys Arg Gln Gly Tyr Arg Glu Pro		575
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Ala Leu Pro Thr Ala Ala Leu Tyr Gly Leu Arg Leu Glu Arg Glu Ala		685
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Gly Glu Gly Trp Ala Ser Glu Ala Gly Lys Pro Leu Leu His Pro Val		700
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Arg Pro Gly His Pro Leu Pro Leu Leu Leu Pro Ala Cys Gly His His		720

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Gly Val Lys Ile Lys Gly Cys Pro Ser Glu Pro Tyr Phe Gly Ser Leu		1200
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Ser Ala Leu Val Ser Gln His Ser Ile Ser Pro Ile Ser Leu Pro Cys		
1220	1225	1230
Cys Leu Arg Ile Pro Ser Lys Asp Pro Leu Glu Glu Thr Pro Glu Ala		
1235	1240	1245
Pro Val Pro Thr Asn Met Ser Thr Ala Ala Asp Leu Leu Arg Gln Gly		
1250	1255	1260
Ala Ala Cys Ser Val Leu Tyr Leu Thr Ser Val Glu Thr Glu Ser Leu		
1265	1270	1275
Thr Gly Pro Gln Ala Val Ala Arg Ala Ser Ser Ala Ala Leu Ser Cys		1280
1285	1290	1295
Ser Pro Arg Pro Thr Pro Ala Val Val His Phe Lys Val Ser Ala Gln		
1300	1305	1310
Gly Ile Thr Leu Thr Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His		
1315	1320	1325
Tyr Pro Val Asn Ser Ile Thr Phe Ser Ser Thr Asp Pro Gln Asp Arg		
1330	1335	1340
Arg Trp Thr Asn Pro Asp Gly Thr Thr Ser Lys Ile Phe Gly Phe Val		
1345	1350	1355
Ala Lys Lys Pro Gly Ser Pro Trp Glu Asn Val Cys His Leu Phe Ala		1360
1365	1370	1375
Glu Leu Asp Pro Asp Gln Pro Ala Gly Ala Ile Val Thr Phe Ile Thr		
1380	1385	1390
Lys Val Leu Leu Gly Gln Arg Lys		
1395	1400	

<210> 805

<211> 550

<212> DNA

<213> Homo sapiens

<400> 805

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ccagaccctc aaaagagagc acctggggga agggagcgtg gaaaccagga ctcagaaaga
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<210> 806
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 806
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 1 5 10 15
 Ser Leu Ser Ile His Ser Trp Leu Thr Phe Leu Ala Gln Gly Val Ser
 20 25 30
 Met Ala Leu Phe Pro Ser Ser Gly His Gln Phe Arg Ser Arg Gly Pro
 35 40 45
 Met Leu Gly Arg Ala Thr Pro Met Asp Leu Ala Arg Thr Leu Ser His
 50 55 60
 Arg Phe His Thr Gln Arg Glu Asp Ser Pro Thr Gln Thr Leu Lys Arg
 65 70 75 80
 Glu His Leu Gly Glu Gly Ser Val Glu Thr Arg Thr Gln Lys Asp Thr
 85 90 95
 Arg Glu Lys Glu Ala Val His Trp Gly Gly Phe Arg Gly Thr Cys Ala
 100 105 110
 Cys His Val Ser Glu Gly
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<210> 807
 <211> 287
 <212> DNA
 <213> Homo sapiens

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 ccgagtgggt cgaagctcag accgggacag gccgctatac cagcgcgagc gattatatct
 180
 gcgccctgat tcgccaggac caggagcgaa gcgacggcct caggcagctt caaacgttga
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<210> 808
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 808
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 1 5 10 15
 Ile Ser Arg Gly Gly Arg Ala Arg Gly Met Ala Thr Val Asn Val Ser

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      20      25      30
Leu Ser Asp Ala Met Thr Glu Trp Val Glu Ala Gln Thr Gly Thr Gly
      35      40      45
Arg Tyr Thr Ser Ala Ser Asp Tyr Ile Cys Ala Leu Ile Arg Gln Asp
      50      55      60
Gln Glu Arg Ser Asp Gly Leu Arg Gln Leu Gln Thr Leu Ile Thr Glu
      65      70      75      80
Gly Phe Asp Ser Gly Ile Ser Ala Ser Ser Leu Asp Asp
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<210> 809
 <211> 405
 <212> DNA
 <213> Homo sapiens

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gacgcgtggt cgcgtcaa at ggagagacga tcggtgccgc ccttgcccca cgatcctgat
180
ggccccgaga ttctgacga tgtcaccacc ctgcccacac aggtaatggg tctgccacgt
240
cacctgggta tccactcagc tggaatgggt ctgacgcgag aaccagtagg acgcatctgc
300
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405

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<210> 810
 <211> 135
 <212> PRT
 <213> Homo sapiens

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<400> 810
Xaa Gly Gly Gly Gly Gly Gly Val Phe Phe Pro Pro Lys Lys Lys Lys
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Gly Gly Gly Gly Gly Pro Pro Pro Pro Pro Pro Leu Phe Phe Pro Arg
      20      25      30
Gly Val Tyr Ser Gln Gly Gln Gln Asp Ala Trp Ser Arg Gln Met Glu
      35      40      45
Arg Arg Ser Val Pro Pro Leu Pro His Asp Pro Asp Gly Pro Glu Ile
      50      55      60
Pro Asp Asp Val Thr Thr Leu Ala Gln Gln Val Met Gly Leu Pro Arg
      65      70      75      80
His Leu Gly Ile His Ser Ala Gly Met Val Leu Thr Arg Glu Pro Val
      85      90      95
Gly Arg Ile Cys Pro Ile Glu Pro Ala Arg Met Phe Gly Arg Thr Gly
      100      105      110
Leu Gln Trp Asp Lys Xaa Asn Cys Ala Trp Met Gly Leu Gly Lys Phe
      115      120      125
Asp Leu Leu Gly Leu Gly Met

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130

135

<210> 811

<211> 642

<212> DNA

<213> Homo sapiens

<400> 811

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 120
 tggtagacaca ttaacaacac ccgggaagca gtactgccaac cacctagata tgagaaaaag
 180
 aaaacaggca cttaaagcga ggctaaccga ctttcaggaa tgataaaggg cagaggaccc
 240
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 300
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 420
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 480
 gactggctcc cactttcctc cgtattgttg tcttgtctct tccctcacia ccatcaaggc
 540
 tctttccctt aattctataa gacagtacct ctggcttaga aattatatgc cctcctttaa
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 aaaaacgaaa tgctagagga catagaactt gaggaataat tt
 642

<210> 812

<211> 106

<212> PRT

<213> Homo sapiens

<400> 812

Met	Val	Val	Arg	Glu	Glu	Thr	Arg	Gln	Gln	Tyr	Gly	Gly	Lys	Trp	Glu
1				5					10					15	
Pro	Val	Ser	His	Pro	Tyr	Lys	Glu	His	Pro	His	Arg	Ala	Gly	Glu	Gln
			20					25					30		
Ala	His	Pro	Glu	Val	Leu	Glu	Ser	Phe	Leu	Gln	Glu	Leu	Arg	Pro	Lys
		35					40					45			
Ala	Ser	Arg	Lys	Glu	Arg	Xaa	Thr	Thr	Asn	Leu	Ile	Phe	Thr	Pro	Phe
	50					55				60					
Pro	Cys	His	Leu	Val	Phe	Pro	Val	Ile	Phe	Asn	Pro	Ile	Leu	Cys	Ala
65				70					75					80	
Ala	Gly	Ala	Ala	Ala	Leu	Trp	Ala	Thr	Pro	Leu	Val	Ala	Gly	Val	Glu
			85					90						95	
Val	Thr	Gly	Ser	Ser	Ala	Leu	Tyr	His	Ser						
			100					105							

<210> 813

<211> 558

<212> DNA

<213> Homo sapiens

<400> 813

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120
gttcgctgac cagcaccggg ccgcccggct gggccgggaa accgtggaac aaggggaagcg
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420
ttgaattgcy tgcgcttatt gtcggcaacc agcccctcgt tcgcggtttt cgcttcgcgc
480
gcgtcgacct gttcgccgaa ccgcgcggcg gcgcagaagg cgaggcgga gaatttgagc
540
ttgttggcgg atacgcgt
558

<210> 814

<211> 151

<212> PRT

<213> Homo sapiens

<400> 814

Met	Thr	Phe	Ser	Ala	Gly	Ser	Leu	Thr	Ser	Thr	Gly	Pro	Pro	Gly	Trp
1				5					10					15	
Ala	Gly	Lys	Pro	Trp	Asn	Lys	Gly	Ser	Gly	Gly	Gly	Ala	Arg	Gly	Asp
			20					25					30		
Ala	Phe	Gly	Pro	Leu	Ala	Phe	Gly	Gln	Arg	Ala	Ala	Gln	Phe	Gly	Val
	35						40					45			
Glu	Asp	Asp	Pro	Arg	Pro	Phe	Asp	Leu	Asp	His	Asp	Leu	Gln	Leu	Pro
	50					55					60				
Ala	Ile	Val	Phe	Ala	Ala	Asp	Ile	Gln	Arg	Ala	Ala	Ala	His	Gln	Arg
65				70					75					80	
Leu	Ala	Gly	Asp	Gln	Gly	Glu	Val	Gln	His	His	Leu	Gln	Arg	Gly	Leu
			85					90						95	
Gly	Gln	Arg	Leu	Arg	Phe	His	Pro	Pro	Val	Glu	Leu	Arg	Ala	Leu	Ile
	100						105						110		
Val	Gly	Asn	Gln	Pro	Leu	Val	Arg	Gly	Phe	Arg	Phe	Ala	Arg	Val	Asp
	115					120					125				
Leu	Phe	Ala	Glu	Pro	Ala	Gly	Gly	Ala	Glu	Gly	Glu	Ala	Glu	Glu	Phe
	130					135					140				
Glu	Leu	Val	Gly	Gly	Tyr	Ala									
145					150										

<210> 815

<211> 315

<212> DNA

<213> Homo sapiens

<400> 815

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120
agctagcgca ggagaaagcc gagacctcac gtccgaagcg gattcagcaa gtgcacaacc
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240
agacctcatt gctgcaccgt taagcgaaga gtccaatgtc agcaagctcg ggccgtcccc
300
tgaggccgat acatc
315

<210> 816

<211> 90

<212> PRT

<213> Homo sapiens

<400> 816

Met	Pro	Ser	Asp	Leu	Pro	Lys	Val	Asp	Asp	Glu	Lys	Ala	His	Asp	Ala
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Pro	His	Thr	Asp	Gly	Ser	Glu	Pro	Gly	Gln	Ala	Ser	Ala	Gly	Glu	Ser
			20					25					30		
Arg	Asp	Leu	Thr	Ser	Glu	Ala	Asp	Ser	Ala	Ser	Ala	Gln	Pro	Ser	Thr
		35					40					45			
His	Ala	Glu	Val	Ser	Ser	Glu	Val	Thr	Ala	Thr	Ser	Ser	Ile	Asp	Glu
	50					55				60					
Gln	Val	Asp	Leu	Ile	Ala	Ala	Pro	Leu	Ser	Glu	Glu	Ser	Asn	Val	Ser
65				70				75						80	
Lys	Leu	Gly	Pro	Ser	Pro	Glu	Ala	Asp	Thr						
			85					90							

<210> 817

<211> 321

<212> DNA

<213> Homo sapiens

<400> 817

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120
aatacacttt tctcaaagct tcaaattaat caatccatta tattctgcaa ctctgttaat
180
agtgttgagc tgctggctaa aaaaataact gaactcgggt attcatgctt ctacattcat
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300
agaaaccttg tgtgcacaga t
321

<210> 818
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 818
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 Asp Glu Leu Thr Leu Lys Gly Ile Thr Gln Tyr Tyr Ala Phe Val Glu
 20 25 30
 Glu Gly Gln Lys Val His Cys Leu Asn Thr Leu Phe Ser Lys Leu Gln
 35 40 45
 Ile Asn Gln Ser Ile Ile Phe Cys Asn Ser Val Asn Ser Val Glu Leu
 50 55 60
 Leu Ala Lys Lys Ile Thr Glu Leu Gly Tyr Ser Cys Phe Tyr Ile His
 65 70 75 80
 Ala Lys Met Leu Gln Asp His Arg Asn Arg Val Phe His Asp Cys Arg
 85 90 95
 Asn Gly Ala Cys Arg Asn Leu Val Cys Thr Asp
 100 105

<210> 819
 <211> 3422
 <212> DNA
 <213> Homo sapiens

<400> 819
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 120
 gcagggggccc atggactctc caaaggcccg ctggagaagc ggccctatct tggcccggct
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 240
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 360
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 420
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 480
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 540
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 ca
 3422

<210> 820

<211> 494

<212> PRT

<213> Homo sapiens

<400> 820

Met	Asn	Ser	Lys	Lys	Leu	Ser	Ser	Thr	Asp	Cys	Phe	Lys	Thr	Glu	Ala
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Phe	Thr	Ser	Pro	Glu	Ala	Leu	Gln	Pro	Gly	Gly	Thr	Ala	Leu	Ala	Pro
			20					25					30		
Lys	Lys	Arg	Ser	Arg	Lys	Gly	Arg	Ala	Gly	Ala	His	Gly	Leu	Ser	Lys
		35				40					45				
Gly	Pro	Leu	Glu	Lys	Arg	Pro	Tyr	Leu	Gly	Pro	Ala	Leu	Pro	Leu	Thr
	50				55				60						
Pro	Arg	Asp	Arg	Ala	Ser	Gly	Thr	Gln	Gly	Ala	Ser	Glu	Asp	Asn	Ser
65				70				75						80	
Gly	Gly	Gly	Gly	Lys	Lys	Pro	Lys	Met	Glu	Glu	Leu	Gly	Leu	Ala	Ser

<212> DNA

<213> Homo sapiens

<400> 821

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120
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180
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300
gaagactatc cctggacgat ggggcagttt gtctggacgg gcttcgacta cctcggtgaa
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<210> 822

<211> 133

<212> PRT

<213> Homo sapiens

<400> 822

Met	Asp	Gln	Val	Ser	Cys	Val	Leu	Asp	Asn	Gly	Phe	Ala	Ala	Ile	Met
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Asp	Val	Pro	Gly	Phe	Asn	Tyr	Arg	Ala	His	Arg	Tyr	Thr	Glu	Ala	Tyr
			20					25					30		
Arg	Arg	Leu	Pro	Gln	Asn	Val	Val	Leu	Gly	Ser	Glu	Thr	Thr	Ser	Thr
		35					40					45			
Val	Ser	Ser	Arg	Gly	Val	Tyr	Lys	Phe	Pro	Val	Val	Leu	Lys	Ser	Asp
	50					55					60				
Ala	Ile	Tyr	Pro	Asp	His	Gln	Ser	Ser	Gly	Tyr	Asp	Thr	Glu	Tyr	Cys
65					70				75					80	
Ser	Trp	Ser	Asn	Thr	Pro	Asp	Val	Asp	Phe	Ala	Leu	Ala	Glu	Asp	Tyr
			85					90					95		
Pro	Trp	Thr	Met	Gly	Gln	Phe	Val	Trp	Thr	Gly	Phe	Asp	Tyr	Leu	Gly
		100						105					110		
Glu	Pro	Ser	Pro	Tyr	Asp	Thr	Asp	Ala	Trp	Pro	Ser	His	Ala	Ser	Leu
		115					120					125			
Phe	Gly	Ile	Val	Asp											
		130													

<210> 823

<211> 550

<212> DNA

<213> Homo sapiens

<400> 823

tctagattct tgggcagccg agccctctt gaattcctca gcctaccatc atgatcaaca
60
cctcccatgt tccgtccatg aatgaccgca ctgacagcac tggagagatt taatgggtca
120

ccaattgagg cagtgaaggc actcatggca ctcagagctg gaatggggct gatctgagtt
 180
 gtactgttga ctgcagtggg gatgacaacc tgcattcctt tgctggctgc atcgacaact
 240
 gctttgtaaa tggcatctac ggaagcatca cctggggccac ccacaacgag gccatccttc
 300
 acctgttgac caagagatgg gtcaatcctc ggttgcaact cacaaggtgt atcttgaaaa
 360
 ggtggaagtg tagtgtttgg attctcagga agtgctgtga gcccaggctg agtgcttatt
 420
 cttttgttta ggagagctgc atcttcctgc attctcacct gaaagttctg aaacagacaa
 480
 gccatggggg tattgttagc tgggcaagga attgtggact gtccttgga cgcctggaga
 540
 ttctggtacc
 550

<210> 824
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 824
 Met Ala Cys Leu Phe Gln Asn Phe Gln Val Arg Met Gln Glu Asp Ala
 1 5 10 15
 Ala Leu Leu Asn Lys Arg Ile Ser Thr Gln Pro Gly Leu Thr Ala Leu
 20 25 30
 Pro Glu Asn Pro Asn Thr Thr Leu Pro Pro Phe Gln Asp Thr Pro Cys
 35 40 45
 Glu Leu Gln Pro Arg Ile Asp Pro Ser Leu Gly Gln Gln Val Lys Asp
 50 55 60
 Gly Leu Val Val Gly Gly Pro Gly Asp Ala Ser Val Asp Ala Ile Tyr
 65 70 75 80
 Lys Ala Val Val Asp Ala Ala Ser Lys Gly Met Gln Val Val Ile Thr
 85 90 95
 Thr Ala Val Asn Ser Thr Thr Gln Ile Ser Pro Ile Pro Ala Leu Ser
 100 105 110
 Ala Met Ser Ala Phe Thr Ala Ser Ile Gly Asp Pro Leu Asn Leu Ser
 115 120 125
 Ser Ala Val Ser Ala Val Ile His Gly Arg Asn Met Gly Gly Val Asp
 130 135 140
 His Asp Gly Arg Leu Arg Asn Ser Arg Gly Ala Arg Leu Pro Lys Asn
 145 150 155 160
 Leu

<210> 825
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 825
 gcgtttgcga ccggccgtaa cccgcagaat gcggcggtgt gttgcactga gggatatttg
 60

cagttgctgg atgagcgcca gatgcgcggc gtgctcggcc acgagctgat gcacgtgtac
 120
 aaccgcgata tcctcacctc ttcgggtggcg gcgggtatcg cctccatcat cggtacgatt
 180
 gcgcagattc tttcgtttgg cgcgatgttc ggtggatcca accgcgatgg tgaacgttcc
 240
 aacccccctc ccatgttcgt ggttgctatg ctggctccca ttgctactca ggtcatccag
 300
 atggctatta gccgcacccg tgaattc
 327

<210> 826
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 826
 Ala Phe Ala Thr Gly Arg Asn Pro Gln Asn Ala Ala Val Cys Cys Thr
 1 5 10 15
 Glu Gly Ile Leu Gln Leu Leu Asp Glu Arg Glu Met Arg Gly Val Leu
 20 25 30
 Gly His Glu Leu Met His Val Tyr Asn Arg Asp Ile Leu Thr Ser Ser
 35 40 45
 Val Ala Ala Gly Ile Ala Ser Ile Ile Gly Thr Ile Ala Gln Ile Leu
 50 55 60
 Ser Phe Gly Ala Met Phe Gly Gly Ser Asn Arg Asp Gly Glu Arg Ser
 65 70 75 80
 Asn Pro Leu Ala Met Phe Val Val Ala Met Leu Ala Pro Ile Ala Thr
 85 90 95
 Gln Val Ile Gln Met Ala Ile Ser Arg Thr Arg Glu Phe
 100 105

<210> 827
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 827
 nacgcgtacg tcaatatgca tcgtccagtc gttatcgcaa cgccgaaatc gatgctgcgc
 60
 aacaagatgg cgacctcgga tcccgaagag ttcaccaccg gtaggtggcg tcctgttcta
 120
 cccgacccat cgatcaccga cccgacggcc gttacgagga ttatcttgtg ctctggcaag
 180
 gcgcgggtggg agctgggtcaa gcaacgtaag gccgccagtc ttgacggaca gctcgccatc
 240
 atccccgatgg agcgtctcta cccgctacca gtcgacgagt tggctgaggt ttttgcgcct
 300
 tacaccaacg tcacggatgt ccgctgggtc caagaagagc cagagaacca gggcgcctgg
 360
 tactacatgc tgaccacact gcccaggcc atgtcggaga agctgccagg attctttgat
 420
 gggttagtcg gcatcaccgc cccaccgtcc tcagctccgt cggtgggaca gcacagcgtc
 480

cacatccgtg aagagcagga gttactcgag aaggctatag cctgagcgac ctga
534

<210> 828

<211> 174

<212> PRT

<213> Homo sapiens

<400> 828

Xaa	Ala	Tyr	Val	Asn	Met	His	Arg	Pro	Val	Val	Ile	Ala	Thr	Pro	Lys
1				5					10					15	
Ser	Met	Leu	Arg	Asn	Lys	Met	Ala	Thr	Ser	Asp	Pro	Glu	Glu	Phe	Thr
			20					25					30		
Thr	Gly	Arg	Trp	Arg	Pro	Val	Leu	Pro	Asp	Pro	Ser	Ile	Thr	Asp	Pro
	35					40						45			
Thr	Ala	Val	Thr	Arg	Ile	Ile	Leu	Cys	Ser	Gly	Lys	Ala	Arg	Trp	Glu
	50					55					60				
Leu	Val	Lys	Gln	Arg	Lys	Ala	Ala	Ser	Leu	Asp	Gly	Gln	Leu	Ala	Ile
65					70					75				80	
Ile	Pro	Met	Glu	Arg	Leu	Tyr	Pro	Leu	Pro	Val	Asp	Glu	Leu	Ala	Glu
				85					90				95		
Val	Phe	Ala	Pro	Tyr	Thr	Asn	Val	Thr	Asp	Val	Arg	Trp	Val	Gln	Glu
			100					105					110		
Glu	Pro	Glu	Asn	Gln	Gly	Ala	Trp	Tyr	Tyr	Met	Leu	Thr	His	Leu	Pro
	115					120						125			
Gln	Ala	Met	Ser	Glu	Lys	Leu	Pro	Gly	Phe	Phe	Asp	Gly	Leu	Val	Gly
	130					135					140				
Ile	Thr	Arg	Pro	Pro	Ser	Ser	Ala	Pro	Ser	Val	Gly	Gln	His	Ser	Val
145					150					155				160	
His	Ile	Arg	Glu	Glu	Gln	Glu	Leu	Leu	Glu	Lys	Ala	Ile	Ala		
				165						170					

<210> 829

<211> 492

<212> DNA

<213> Homo sapiens

<400> 829

nagtggccgg gtggccggcg ggtgccagcc gccatggagg ccgtgccccg catgcccattg
60
atctggctgg acctgaagga ggccggtgac tttcacttcc agccagctgt gaagaagttt
120
gtcctgaaga attatggaga gaacccagaa gcctacaatg aagaactgaa gaagctggag
180
ttgctcagac agaattgctgt ccgtgtccca cgagactttg agggctgtag tgtcctccgc
240
aagtacctcg gccagcttca ttacctgcag agtcgggtcc ccatgggctc gggccaggag
300
gccgctgtcc ctgtcacatg gacagagatc ttctcaggca agtctgtggc ccatgaggac
360
atcaagtacg agcaggcctg tattttctcc aacnttggag cgctgcactc catgctgggg
420
gccatggaca agcgggtgtc tgaggagggc atgaaggctt cctgtaccca tttccagtgc
480

gcagccggcg cc
492

<210> 830
<211> 164
<212> PRT
<213> Homo sapiens

<400> 830
Xaa Trp Pro Gly Gly Arg Arg Val Pro Ala Ala Met Glu Ala Val Pro
1 5 10 15
Arg Met Pro Met Ile Trp Leu Asp Leu Lys Glu Ala Gly Asp Phe His
20 25 30
Phe Gln Pro Ala Val Lys Lys Phe Val Leu Lys Asn Tyr Gly Glu Asn
35 40 45
Pro Glu Ala Tyr Asn Glu Glu Leu Lys Lys Leu Glu Leu Leu Arg Gln
50 55 60
Asn Ala Val Arg Val Pro Arg Asp Phe Glu Gly Cys Ser Val Leu Arg
65 70 75 80
Lys Tyr Leu Gly Gln Leu His Tyr Leu Gln Ser Arg Val Pro Met Gly
85 90 95
Ser Gly Gln Glu Ala Ala Val Pro Val Thr Trp Thr Glu Ile Phe Ser
100 105 110
Gly Lys Ser Val Ala His Glu Asp Ile Lys Tyr Glu Gln Ala Cys Ile
115 120 125
Phe Ser Asn Xaa Gly Ala Leu His Ser Met Leu Gly Ala Met Asp Lys
130 135 140
Arg Val Ser Glu Glu Gly Met Lys Val Ser Cys Thr His Phe Gln Cys
145 150 155 160
Ala Ala Gly Ala

<210> 831
<211> 303
<212> DNA
<213> Homo sapiens

<400> 831
gcgttgctgc ggcgtggcga gaccatgacg gcggagaatc agcgtgccaa tgtgcgcac
60
gccgcaaacc acatcaagga gggtgcggtc gatcacgagg tcgttgtagc ccatggtaat
120
ggccccaggt taggtctgtt ggctctgcaa tcgacagcct acgaggaagt cggtatctat
180
ccgctggatg tcctgggcgc agagtcacag gccatgatcg gctacatgat cgagcaggaa
240
ctcggcaatg tgatgcctca ggatcagcag atcgtcacca tgatcacgat gacagtcgtc
300
gac
303

<210> 832
<211> 101
<212> PRT

<213> Homo sapiens

<400> 832

```

Ala Leu Leu Arg Arg Gly Glu Thr Met Thr Ala Glu Asn Gln Arg Ala
 1           5           10           15
Asn Val Arg Ile Ala Ala Asn His Ile Lys Glu Val Ala Val Asp His
      20           25           30
Glu Val Val Val Ala His Gly Asn Gly Pro Gln Val Gly Leu Leu Ala
      35           40           45
Leu Gln Ser Thr Ala Tyr Glu Val Gly Ile Tyr Pro Leu Asp Val
      50           55           60
Leu Gly Ala Glu Ser Gln Ala Met Ile Gly Tyr Met Ile Glu Gln Glu
65           70           75           80
Leu Gly Asn Val Met Pro Gln Asp Gln Gln Ile Val Thr Met Ile Thr
      85           90           95
Met Thr Val Val Asp
      100

```

<210> 833

<211> 466

<212> DNA

<213> Homo sapiens

<400> 833

```

nngatccgcg cgatcgacga ggcgggtgcg tgatgttgac agcgaaaatg cgcagccggc
60
catttgacga gggctgaaaa cgtcttctac cggctctgctg tgccgcctgg tgtcagcaaa
120
cgacgccatg atcgctccagt gggatcgcg ttgttctgcg gcgctggggg attcagttgc
180
ggattccacc aggccgggtg gcatgttgcg gcggcggttg agcacgacgt gtcggcgctct
240
ctgacctatg tcatgaatct cgctcggccc ggcgtcaaga ttcacatcga ccccgagcac
300
ccggagctgg gcccaagacc accgcgaacc aagaagaaga gcggcggcgc agtgccgttc
360
gatgcgcgcatg tcggaactgg gtggatcgcc agcgagcccg ccgacgatcc cggctgcgaa
420
cacttctacg tgtacgacgt caagaacctc agcggcgagc ggatcc
466

```

<210> 834

<211> 142

<212> PRT

<213> Homo sapiens

<400> 834

```

Gln Arg Lys Cys Ala Ala Gly His Leu Thr Arg Ala Glu Asn Val Phe
 1           5           10           15
Tyr Arg Ser Ala Val Pro Pro Gly Val Ser Lys Arg Arg His Asp Arg
      20           25           30
Pro Val Gly Ile Asp Leu Phe Cys Gly Ala Gly Gly Phe Ser Cys Gly
      35           40           45
Phe His Gln Ala Gly Trp His Val Ala Ala Ala Val Glu His Asp Val

```

```

      50      55      60
Ser Ala Ser Leu Thr Tyr Val Met Asn Leu Ala Arg Pro Gly Val Lys
65      70      75      80
Ile His Ile Asp Pro Glu His Pro Glu Leu Gly Pro Arg Pro Pro Arg
      85      90      95
Thr Lys Lys Lys Ser Gly Gly Ala Val Pro Phe Asp Ala His Val Gly
      100      105      110
Thr Gly Trp Ile Ala Ser Glu Pro Ala Asp Asp Pro Gly Cys Glu His
      115      120      125
Phe Tyr Val Tyr Asp Val Lys Asn Leu Ser Gly Glu Arg Ile
      130      135      140

```

<210> 835
 <211> 482
 <212> DNA
 <213> Homo sapiens

```

<400> 835
acgcgtgaag ggattttgat caccagaac aaccacctgt ctttttagat caagaagcag
60
aagctcagag caaagaacat cacaccacgt ccctcagtga ttgaagcagt gattgagtca
120
cagaataaat ctggaactca ggtcttctga tctttgctcc agatgtaga gacaaaacta
180
aaagtaaaat accaagtga atcaaagcat cacgattgag ccagaacat gaaaaagaac
240
ttcctggccc acttgagaaa ctgttaaacc ggacatacct ttggggactt cttcccttct
300
ctggaataag attgatgttt ccatgctgtg aaagacgatg atgttccttc tcccagattc
360
ctgctgtctt caaaaggcct agcaaaaacc actgctgctg ggtgcagttg agaaagggaa
420
tgaagaacaa tcccatggcc atgcaggcac tcctcccctc cacctctctg cccttcacgc
480
gt
482

```

<210> 836
 <211> 120
 <212> PRT
 <213> Homo sapiens

```

<400> 836
Met Ala Met Gly Leu Phe Phe Ile Pro Phe Leu Asn Cys Thr Gln Gln
1      5      10      15
Gln Trp Phe Leu Leu Gly Leu Leu Lys Thr Ala Gly Ile Trp Glu Lys
      20      25      30
Glu His His Arg Leu Ser Gln His Gly Asn Ile Asn Leu Ile Pro Glu
      35      40      45
Lys Gly Arg Ser Pro Gln Arg Tyr Val Arg Phe Asn Ser Phe Ser Ser
      50      55      60
Gly Pro Gly Ser Ser Phe Ser Cys Ser Gly Leu Asn Arg Asp Ala Leu
65      70      75      80
Ile Ser Leu Gly Ile Leu Leu Leu Val Leu Ser Leu Thr Ser Gly Ala

```

				85					90					95		
Lys	Ile	Arg	Arg	Pro	Glu	Phe	Gln	Ile	Tyr	Ser	Val	Thr	Gln	Ser	Leu	
			100					105						110		
Leu	Gln	Ser	Leu	Arg	Asp	Val	Val									
		115					120									

```
<210> 837
<211> 509
<212> DNA
<213> Homo sapiens
```

```

<400> 837
acgcgtggac ccccggttctg cccgcctttg cagtcatcgc cctccctgaa gtcaccgctg
60
cagaaatacg caggcactga cctgggggta cagccaggca agggagagac gaggggctca
120
ctctgcacca gccaaaggcct gtgtcctggc atggctcccc caggaagcga ggatggcggt
180
gcctggcggt cgagccctc ttatcctggg gaatgctggg gggcgttcct gagcagacct
240
gcctgctgcc cctgctggct ggcactgccc ctcccccggg gaaaggttgg gtggtcccc
300
caggggaact caaagcaggg gagcccttg aggccccaa tccctggaat atcttggcgc
360
tcagatggcc ccctcgaac accctcacac gggggggccg cgcggtggga ggtgaccag
420
cagccactct tacttggcga agacttttct cccaatgcga gcgcgggtgg tatcagcctg
480
agccttcagg ttggtgaggc tggggtacc
509

```

```
<210> 838
<211> 119
<212> PRT
<213> Homo sapiens
```

```

<400> 838
Met Ala Pro Pro Gly Ser Glu Asp Gly Gly Ala Trp Arg Ser Ser Pro
 1          5          10          15
Ser Tyr Pro Gly Cys Trp Gly Ala Phe Leu Ser Arg Pro Ala Cys
      20          25          30
Cys Pro Cys Trp Leu Ala Leu Pro Leu Pro Arg Gly Lys Val Gly Trp
      35          40          45
Ser Pro Gln Gly Asn Ser Lys Gln Gly Ser Pro Trp Arg Pro Gln Val
      50          55          60
Pro Gly Ile Ser Trp Arg Ser Asp Gly Pro Pro Arg Thr Pro Ser His
65          70          75          80
Gly Gly Ala Ala Arg Trp Glu Val Thr Gln Gln Pro Leu Leu Leu Gly
      85          90          95
Glu Asp Phe Ser Pro Asn Ala Ser Ala Gly Gly Ile Ser Leu Ser Leu
      100          105          110
Gln Val Gly Glu Ala Gly Val
      115

```

<210> 839
 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 839
 acgcgtctcg tggtcgtgcg gcacggcagg acggcggttca atgtggaggg tcggctccag
 60
 ggccgtctcg acatgccgtt ggatgaggtg gggcgccgctc aggcactcac agtgggtcaa
 120
 gtcacgccc agatggaacc tgacgcgac atggcctctc cgctacaacg tgcgcgcgac
 180
 acagctcagg caatcgggtgc ttgtgctgga ttgggcgtac agctggatga tcgactcatc
 240
 gagatcgatg tcggacgttg gtcgggacaa cgggctgcgg acctgcgtcg caacgatcct
 300
 gagtacgcag caagtgtggt cagccctatc gattaccggg tcggagn
 347

<210> 840
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 840
 Thr Arg Leu Val Phe Val Arg His Gly Arg Thr Ala Phe Asn Val Glu
 1 5 10 15
 Gly Arg Leu Gln Gly Arg Leu Asp Met Pro Leu Asp Glu Val Gly Arg
 20 25 30
 Arg Gln Ala Leu Thr Val Ala Gln Val Ile Ala Glu Met Glu Pro Asp
 35 40 45
 Ala Ile Met Ala Ser Pro Leu Gln Arg Ala Arg Asp Thr Ala Gln Ala
 50 55 60
 Ile Gly Ala Cys Ala Gly Leu Gly Val Gln Leu Asp Asp Arg Leu Ile
 65 70 75 80
 Glu Ile Asp Val Gly Arg Trp Ser Gly Gln Arg Ala Ala Asp Leu Arg
 85 90 95
 Arg Asn Asp Pro Glu Tyr Ala Ala Ser Val Val Ser Pro Ile Asp Tyr
 100 105 110
 Arg Val Gly
 115

<210> 841
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 841
 tccggaactc accccgacgc cgtcattatg gacgtcatga tgccgcgtct agatggcttg
 60
 gaagccaccc ggatgctgcg cagcaatggc aacgacgtcc cgatcctcgt cctcaccgcc
 120
 cgcgatgctg tcgacgatcg cgttgacggc ctcgacgctg gcgccgatga ctacatggtc
 180

aagcccttcg ccctcgacga actcctcgtc cgcctacgcg ccctcactcg tcgttcccgt
 240
 cccgagccag agcaaaacga ggcccttgaa caactctcct tcgctgacct cacccttgat
 300
 ccaggcaccg gcgagatcac ccgcgggaac cgtcgcacga gtttgacgcg t
 351

<210> 842
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 842
 Ser Gly Thr His Pro Asp Ala Val Ile Met Asp Val Met Met Pro Arg
 1 5 10 15
 Leu Asp Gly Leu Glu Ala Thr Arg Met Leu Arg Ser Asn Gly Asn Asp
 20 25 30
 Val Pro Ile Leu Val Leu Thr Ala Arg Asp Ala Val Asp Asp Arg Val
 35 40 45
 Asp Gly Leu Asp Ala Gly Ala Asp Asp Tyr Met Val Lys Pro Phe Ala
 50 55 60
 Leu Asp Glu Leu Leu Ala Arg Leu Arg Ala Leu Thr Arg Arg Ser Arg
 65 70 75 80
 Pro Glu Pro Glu Gln Asn Glu Ala Pro Glu Gln Leu Ser Phe Ala Asp
 85 90 95
 Leu Thr Leu Asp Pro Gly Thr Arg Glu Ile Thr Arg Gly Asn Arg Arg
 100 105 110
 Ile Ser Leu Thr Arg
 115

<210> 843
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 843
 ctgcccagg ctctcgacca cgaggggctg cgcgctgtgg cctctggggc aaaccgggc
 60
 ggcctcaagc gcggtatcga gaaggctgtc gacgccgttg tggaggagct ccgctctatc
 120
 tcgcgcgcca tcgacaccac ctccgacatg gccagcgttg ccaccatctc cagccgtgac
 180
 gagaccatcg gcgccctcat cgctgaggcc ttcgacaagg ttggttaagga cgggggttatc
 240
 accgtcgacg agtcgcagac ctccggcact gagcttgact tcaccgaggg catgcagttc
 300
 gacaaggggtt acctgtcgcc ctacatgggc accgaccagg ttcgcatgga ggctgtgatc
 360
 gaggatcctt acatcctcat tcaactccgc aag
 393

<210> 844
 <211> 131
 <212> PRT

<213> Homo sapiens

<400> 844

```

Leu Ala Gln Ala Leu Val His Glu Gly Leu Arg Ala Val Ala Ser Gly
 1           5           10           15
Ala Asn Pro Val Gly Leu Lys Arg Gly Ile Glu Lys Ala Val Asp Ala
      20           25           30
Val Val Glu Glu Leu Arg Ser Ile Ser Arg Ala Ile Asp Thr Thr Ser
      35           40           45
Asp Met Ala Ser Val Ala Thr Ile Ser Ser Arg Asp Glu Thr Ile Gly
      50           55           60
Ala Leu Ile Ala Glu Ala Phe Asp Lys Val Gly Lys Asp Gly Val Ile
      65           70           75           80
Thr Val Asp Glu Ser Gln Thr Phe Gly Thr Glu Leu Asp Phe Thr Glu
      85           90           95
Gly Met Gln Phe Asp Lys Gly Tyr Leu Ser Pro Tyr Met Val Thr Asp
      100          105          110
Gln Val Arg Met Glu Ala Val Ile Glu Asp Pro Tyr Ile Leu Ile His
      115          120          125
Ser Arg Lys
      130

```

<210> 845

<211> 505

<212> DNA

<213> Homo sapiens

<400> 845

```

gccacctgcc caaggctgga tgacgggcct agggcacatc taaggaacaa ggacaggaca
60
gaagcaaagc cacagctgct ggggcagggt gggggccggt atgtctggcc agcagcatca
120
cccttgcccc cggcggggct ccaggaccgg gagactcatc agccggaagc tcttgaggga
180
ggcggctgcc gtgaagacag gcacccttgc tcttgagagg ggcaccaga gaaccaagac
240
tcagcagagg gaacacaggg ctacgcccag gcccaggcc tgatatccag agtctaaatc
300
ccacctcagc ccagggggga gccttgagag gagctatgtc cctcatggac cccagtttcc
360
tctgcatacg ggctccgagc cctgcactgc ctccagggtg gttcccaagg tcttttccca
420
ttacctcta cgtgagcact cagtaaacca atacacatac acaagggtga cattaattcc
480
agccacagaa tcccaggcca cgcgt
505

```

<210> 846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 846

```

Met Gly Lys Asp Leu Gly Asn Tyr Pro Gly Gly Ser Ala Gly Leu Gly

```

```

      1           5           10           15
Ala Arg Met Gln Arg Lys Leu Gly Ser Met Arg Asp Ile Ala Pro Leu
      20           25           30
Lys Ala Pro Pro Trp Ala Glu Val Gly Phe Arg Leu Trp Ile Ser Gly
      35           40           45
Leu Gly Pro Gly Arg Ser Pro Val Phe Pro Leu Leu Ser Leu Gly Ser
      50           55           60
Leu Gly Ala Pro Leu Arg Ser Lys Gly Ala Cys Leu His Gly Ser Arg
65           70           75           80
Leu Leu Gln Glu Leu Pro Ala Asp Glu Ser Pro Gly Pro Gly Ala Pro
      85           90           95
Pro Gly Ala Gly Val Met Leu Leu Ala Arg His Thr Gly Pro His Pro
      100          105          110
Ala Pro Ala Ala Val Ala Leu Leu Leu Ser Cys Pro Cys Ser Leu Asp
      115          120          125
Val Pro
      130

```

<210> 847
 <211> 448
 <212> DNA
 <213> Homo sapiens

```

<400> 847
aagcttttaa aggagcaaga aaacatgaaa gagctagtag tcaaccttct ccgcatgact
60
caaatcaaaa ttgatgaaaa ggaacaaaag tccaaggatt tcctgaaagc tcagcaaaaa
120
tacaccaaca ttgttaaaga aatgaaagca aaggatcttg aaatcaggat acacaagaag
180
aaaaaatgtg aaatttatcg gagactgaga gagcttgcta aactgtatga caccattcga
240
aatgaaagaa acaaatttgt taacttactc cacaaagctc atcagaaagt aaatgaaata
300
aaagaaaggc ataaaatgtc attaaatgaa cttgaaattc tgagaaatag tgccgtagt
360
caagaaagaa agctacaaaa ttccatgctg aaacacgccca acaatgttac catcagagag
420
agcatgcaaa acgatgtgcg caaaattt
448

```

<210> 848
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 848
Lys Leu Leu Lys Glu Gln Glu Asn Met Lys Glu Leu Val Val Asn Leu
      1           5           10           15
Leu Arg Met Thr Gln Ile Lys Ile Asp Glu Lys Glu Gln Lys Ser Lys
      20           25           30
Asp Phe Leu Lys Ala Gln Gln Lys Tyr Thr Asn Ile Val Lys Glu Met
      35           40           45
Lys Ala Lys Asp Leu Glu Ile Arg Ile His Lys Lys Lys Lys Cys Glu

```



```

      50      55      60
Ile Tyr Arg Arg Leu Arg Glu Leu Ala Lys Leu Tyr Asp Thr Ile Arg
65      70      75      80
Asn Glu Arg Asn Lys Phe Val Asn Leu Leu His Lys Ala His Gln Lys
      85      90      95
Val Asn Glu Ile Lys Glu Arg His Lys Met Ser Leu Asn Glu Leu Glu
      100      105      110
Ile Leu Arg Asn Ser Ala Val Ser Gln Glu Arg Lys Leu Gln Asn Ser
      115      120      125
Met Leu Lys His Ala Asn Asn Val Thr Ile Arg Glu Ser Met Gln Asn
      130      135      140
Asp Val Arg Lys Ile
145

```

```

<210> 849
<211> 463
<212> DNA
<213> Homo sapiens

```

```

<400> 849
nnacgcgtga ttgttggggc caaggaatgc catgtggaga gtgcaggtga agtgataagt
60
cttttggaga tggggaatgc agccagacat acaggtacca ctcaaataaa tgagcactcc
120
agcagatcac atgcaatttt tacaatcagc atttgtcaag ttcataaaaa tatggaggca
180
gctgaagatg gatcatggta tccccctcgg catattgtct caaagttcca ctttgtggat
240
ttggcaggat cagaaagagt aacccaaacg ggaataactg gtgaacgggt caaagaatcc
300
attcaaataca atagtggatt gctggcttta ggaaatgtaa taagcgctct tggggaccca
360
cgcaggaaga gttcacatat tccatatagg gatgctaaaa ttaccgggct tctgaaagat
420
tctctgggag gcagtgctaa gactgtcatg atcacatgtg tca
463

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```

<210> 850
<211> 154
<212> PRT
<213> Homo sapiens

```

```

<400> 850
Xaa Arg Val Ile Val Gly Ala Lys Glu Cys His Val Glu Ser Ala Gly
1      5      10      15
Glu Val Ile Ser Leu Leu Glu Met Gly Asn Ala Ala Arg His Thr Gly
      20      25      30
Thr Thr Gln Met Asn Glu His Ser Ser Arg Ser His Ala Ile Phe Thr
      35      40      45
Ile Ser Ile Cys Gln Val His Lys Asn Met Glu Ala Ala Glu Asp Gly
      50      55      60
Ser Trp Tyr Ser Pro Arg His Ile Val Ser Lys Phe His Phe Val Asp
65      70      75      80
Leu Ala Gly Ser Glu Arg Val Thr Lys Thr Gly Asn Thr Gly Glu Arg

```

[illegible]

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<210> 851
<211> 372
<212> DNA
<213> Homo sapiens
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<400> 851
aaatttcctg tttctgatcg acgaaataaa gtttagcgtg atgagtgagc tgcttatgca
60
gttcctccat tcgcttataa acagttttat ttctcatttc gaaaactctc gatgcagaat
120
aaaggctaga gtctggggac caagtcccca gctccgttta cgcgacttcc ttgaccttgt
180
ttgttatgct gataaggtta ttcagcttga cgatttggtc gtggtctttc aaccgttttg
240
cagctggtcg acgatattcc tggtaggaac tacgatagaa gaccagcatc ggaagaactt
300
tgtagatgct gaacaaacac ccaccgatca cttcagcctc gaagtaaggg ttatactgtc
360
taaccacgc gt
372
```

```
<210> 852
<211> 110
<212> PRT
<213> Homo sapiens
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<400> 852															
Met	Ser	Glu	Leu	Leu	Met	Gln	Phe	Leu	His	Ser	Leu	Ile	Asn	Ser	Phe
1				5					10					15	
Ile	Ser	His	Phe	Glu	Asn	Ser	Arg	Cys	Arg	Ile	Lys	Ala	Arg	Val	Trp
			20					25					30		
Gly	Pro	Ser	Pro	Gln	Leu	Arg	Leu	Arg	Asp	Phe	Leu	Asp	Leu	Val	Cys
		35					40					45			
Tyr	Ala	Asp	Lys	Val	Ile	Gln	Leu	Asp	Asp	Leu	Phe	Val	Val	Phe	Gln
	50					55					60				
Pro	Phe	Cys	Ser	Trp	Ser	Thr	Ile	Phe	Leu	Val	Gly	Thr	Thr	Ile	Glu
65					70					75				80	
Asp	Gln	His	Arg	Lys	Asn	Phe	Val	Asp	Ala	Glu	Gln	Thr	Pro	Thr	Asp
				85					90					95	
His	Phe	Ser	Leu	Glu	Val	Arg	Val	Ile	Leu	Ser	Asn	Pro	Arg		
			100					105					110		

<210> 853
<211> 423

<212> DNA

<213> Homo sapiens

<400> 853

acgcgttcag aaacttatgg tgaaatggcc gaactagaaa acctagtcga cgaatattac
60
caagctatgg gcatggatgt gcgtcgagaa acctggctgc gcgagcagat actcaagaaa
120
gtccaagaaa cgcatttggt agaagagctt gcaggcatag aatcaggtga tgatggcgca
180
gtggtggaag agagcgtatt agaaggcctc gatacctatt tatgtgagat aaaagaagca
240
cagattcgtc atggattgca tcgtcttgga gaattaccag aagacgataa attggccgat
300
accttggtcg ccttattgcg ttacccccgt ggcagtgaca ttaccagcaa ggggaattttg
360
catgccttaa tggcagattt agagttagaa caagacgatt ttgacccaat gcaaagcacg
420
cgt
423

<210> 854

<211> 141

<212> PRT

<213> Homo sapiens

<400> 854

Thr	Arg	Ser	Glu	Thr	Tyr	Gly	Glu	Met	Ala	Glu	Leu	Glu	Asn	Leu	Val
1				5					10					15	
Asp	Glu	Tyr	Tyr	Gln	Ala	Met	Gly	Met	Asp	Val	Arg	Arg	Glu	Thr	Trp
			20					25					30		
Leu	Arg	Glu	Gln	Ile	Leu	Lys	Lys	Val	Gln	Glu	Thr	His	Leu	Leu	Glu
		35				40					45				
Glu	Leu	Ala	Gly	Ile	Glu	Ser	Gly	Asp	Asp	Gly	Ala	Val	Val	Glu	Glu
	50				55				60						
Ser	Val	Leu	Glu	Gly	Leu	Asp	Thr	Tyr	Leu	Cys	Glu	Ile	Lys	Glu	Ala
65				70					75					80	
Gln	Ile	Arg	His	Gly	Leu	His	Arg	Leu	Gly	Glu	Leu	Pro	Glu	Asp	Asp
			85					90						95	
Lys	Leu	Ala	Asp	Thr	Leu	Val	Ala	Leu	Leu	Arg	Leu	Pro	Arg	Gly	Ser
			100					105						110	
Asp	Ile	Thr	Ser	Lys	Gly	Ile	Leu	His	Ala	Leu	Met	Ala	Asp	Leu	Glu
		115				120						125			
Leu	Glu	Gln	Asp	Asp	Phe	Asp	Pro	Met	Gln	Ser	Thr	Arg			
		130				135						140			

<210> 855

<211> 338

<212> DNA

<213> Homo sapiens

<400> 855

acgcgtgaag ggggagctca aagtagatgg acctctgact agatggagct ctgagtaaga
60

tgaatgtctg tgcggatgtt gctcacagca agatagtgtt tggagcgatt ggcacttcga
 120
 acaagatgga gcatggagca gatggagctc tgagcaagat ggagcgtgga gtagatagag
 180
 cttggagcaa gaaggagctc caagcaagat ggagcttgca gcaggtgctt ctcagtgtaa
 240
 gatggagctc agagaagatg atgctcagag taagattgag ctcggtgatt ggcactccaa
 300
 acattgtctt gagcccattg gagnctctga gcagaaaag
 338

<210> 856
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 856
 Met Asn Val Cys Ala Asp Val Ala His Ser Lys Ile Val Leu Gly Ala
 1 5 10 15
 Ile Gly Thr Ser Asn Lys Met Glu His Gly Ala Asp Gly Ala Leu Ser
 20 25 30
 Lys Met Glu Arg Gly Val Asp Arg Ala Trp Ser Lys Lys Glu Leu Gln
 35 40 45
 Ala Arg Trp Ser Leu Gln Gln Val Leu Leu Ser Val Arg Trp Ser Ser
 50 55 60
 Glu Lys Met Met Leu Arg Val Arg Leu Ser Ser Val Ile Gly Thr Pro
 65 70 75 80
 Asn Ile Ala Leu Ser Pro Leu Glu Xaa Leu Ser Arg Lys
 85 90

<210> 857
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 857
 ccggacagtg ggccaccagt gtttgccccc agcaatcatg tcagtgaagc ccaacctcgg
 60
 gagacacccc ggcccctcat gcctcctacc aagcctttcc tagcacctga gaccaccagc
 120
 cctggtgaca gggaggagac ccctgtgggg gagagagccc caaccctgt ctcagcaagc
 180
 tctgaggtct ccctgagag ccaagaggac tcagagaccc cagcagagga ggacagtggc
 240
 tctgagcagc ctcccaacag cgtcctgcct gacaaaactga aggtgagctg ggagaacccc
 300
 agccccagc aggcccctgc tgcagagagt gcagaaccgt cccaggcacc ctgttctgag
 360
 acttctgagg ctgccccag ggaggggtggg aagcccccta caccaccacc caagatctta
 420
 tcagagaaac tgaaa
 435

<210> 858

<211> 145
 <212> PRT
 <213> Homo sapiens

<400> 858
 Pro Asp Ser Gly Pro Pro Val Phe Ala Pro Ser Asn His Val Ser Glu
 1 5 10 15
 Ala Gln Pro Arg Glu Thr Pro Arg Pro Leu Met Pro Pro Thr Lys Pro
 20 25 30
 Phe Leu Ala Pro Glu Thr Thr Ser Pro Gly Asp Arg Val Glu Thr Pro
 35 40 45
 Val Gly Glu Arg Ala Pro Thr Pro Val Ser Ala Ser Ser Glu Val Ser
 50 55 60
 Pro Glu Ser Gln Glu Asp Ser Glu Thr Pro Ala Glu Glu Asp Ser Gly
 65 70 75 80
 Ser Glu Gln Pro Pro Asn Ser Val Leu Pro Asp Lys Leu Lys Val Ser
 85 90 95
 Trp Glu Asn Pro Ser Pro Gln Glu Ala Pro Ala Ala Glu Ser Ala Glu
 100 105 110
 Pro Ser Gln Ala Pro Cys Ser Glu Thr Ser Glu Ala Ala Pro Arg Glu
 115 120 125
 Gly Gly Lys Pro Pro Thr Pro Pro Pro Lys Ile Leu Ser Glu Lys Leu
 130 135 140
 Lys
 145

<210> 859
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 859
 nacgcgtggt gtggtaatcc ggtttctggt ggcgacggct gccacccctc gtggcaagac
 60
 atgccgttgc gtgccgatat gccatacgaa gcttggccta gtgcgaaaag ctcgctggaa
 120
 ccctcgaaga ggcagggctc gcaggttacc gtggctcggtg tacgcatcgt ttcgacgatg
 180
 aaccccatte tgggagcaga tatgacgacg taccagtacc tcattgtcgg tggcgggatg
 240
 gccgtgatt ctgccgcccg cggtatccgc gacatcgaca agaaagggtc gatcgccatc
 300
 ctcagcgctg acgtcgacgc cccgtatcct cggccagcgc tgagcaagaa gctgtggact
 360
 gaccctgagt tcacctggga ccaggtcgac cttgctactg tcgctgacac cggcgcggaa
 420
 ttgcggctcg gcaactgaggt gctcagcatt gaccgtgacg gcaagaccgt cctgaccgct
 480
 tccggccagg tattcggcta ccagaagttg ctgctcgta ccggccttac cccgtcgcgc
 540
 attgacgacg acggcgatgc c
 561

<210> 860

<211> 187
 <212> PRT
 <213> Homo sapiens

<400> 860
 Xaa Ala Trp Cys Gly Asn Pro Val Ser Gly Gly Asp Gly Cys His Pro
 1 5 10 15
 Ser Trp Gln Asp Met Pro Leu Arg Ala Asp Met Pro Tyr Glu Ala Trp
 20 25 30
 Pro Ser Ala Lys Ser Ser Leu Glu Pro Ser Lys Arg Gln Gly Arg Gln
 35 40 45
 Val Thr Val Val Gly Val Arg Ile Val Ser Thr Met Asn Pro Ile Leu
 50 55 60
 Gly Ala Asp Met Thr Thr Tyr Gln Tyr Leu Ile Val Gly Gly Gly Met
 65 70 75 80
 Ala Ala Asp Ser Ala Ala Arg Gly Ile Arg Asp Ile Asp Lys Lys Gly
 85 90 95
 Ser Ile Ala Ile Leu Ser Ala Asp Val Asp Ala Pro Tyr Pro Arg Pro
 100 105 110
 Ala Leu Ser Lys Lys Leu Trp Thr Asp Pro Glu Phe Thr Trp Asp Gln
 115 120 125
 Val Asp Leu Ala Thr Val Ala Asp Thr Gly Ala Glu Leu Arg Leu Gly
 130 135 140
 Thr Glu Val Leu Ser Ile Asp Arg Asp Gly Lys Thr Val Leu Thr Ala
 145 150 155 160
 Ser Gly Gln Val Phe Gly Tyr Gln Lys Leu Leu Leu Val Thr Gly Leu
 165 170 175
 Thr Pro Ser Arg Ile Asp Asp Asp Gly Asp Ala
 180 185

<210> 861
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 861
 ccatgggttt ctatgctctg aggtttcatc tgtggggaac agtattgact tacttacaaa
 60
 gagataatgg tcatacccta tgggtcactca ccatagtctg gcggtacatg gacttctcag
 120
 cccagtaag atctgtatcc acaggacact taaagtcacc ttacagaggg ctatcccagt
 180
 gcctgagggc tattagaggg gtctcttttc agccatcagt gttagaggcc atctgcatgg
 240
 gatcccagag cctgcctcgg gaatggcaga agctggctgg tgcttggcgt gggctttgcc
 300
 tgtttctactg ctttcaggga ggcctgccac aggggagaaa ctgggggggg ga
 352

<210> 862
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 862

Met Gly Phe Tyr Ala Leu Arg Phe His Leu Trp Gly Thr Val Leu Thr
 1 5 10 15
 Tyr Leu Gln Arg Asp Asn Gly His Thr Leu Trp Ser Leu Thr Ile Val
 20 25 30
 Trp Arg Tyr Met Asp Phe Ser Ala Pro Val Arg Ser Val Ser Thr Gly
 35 40 45
 His Leu Lys Ser Pro Tyr Arg Gly Leu Ser Gln Cys Leu Arg Pro Ile
 50 55 60
 Arg Gly Val Ser Phe Gln Pro Ser Val Leu Glu Ala Ile Cys Met Gly
 65 70 75 80
 Ser Gln Ser Leu Pro Arg Glu Trp Gln Lys Leu Ala Gly Ala Trp Arg
 85 90 95
 Gly Leu Cys Leu Phe His Cys Phe Gln Gly Gly Leu Pro Gln Gly Arg
 100 105 110
 Asn Trp Gly Gly
 115

<210> 863

<211> 327

<212> DNA

<213> Homo sapiens

<400> 863

tccggatcga cccggacgaa ttccacggtc cagccattga cttccaaatg ctctttgaca
 60
 tacgccgtga catgttcaat gtccaactta cgcattgtcca cccgctcacc ggtctcattg
 120
 agtttgagct gcgagtagac gttgcggttag ttctcgttga ccgactgctc atacgagatg
 180
 tgcagaagca tcggtttgcg gccatcctcg gacggcattg gcttggttgta catggccgct
 240
 tggcggaaca tggttcagggt aaagcccgac ttgaagttgt gcgacagggc agaaacacac
 300
 agcatttctg accggcgatg acccatn
 327

<210> 864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 864

Met Gly His Arg Arg Ser Glu Met Leu Cys Val Ser Ala Leu Ser His
 1 5 10 15
 Asn Phe Lys Ser Gly Phe Thr Leu Asn Met Phe Arg Gln Ala Ala Met
 20 25 30
 Tyr Asn Lys Pro Met Pro Ser Glu Asp Gly Arg Lys Pro Met Leu Leu
 35 40 45
 His Ile Ser Tyr Glu Gln Ser Val Asn Glu Asn Tyr Arg Asn Val Tyr
 50 55 60
 Ser Gln Leu Lys Leu Asn Glu Thr Gly Glu Arg Val Asp Met Arg Lys
 65 70 75 80
 Leu Asp Ile Glu His Val Thr Ala Tyr Val Lys Glu His Leu Glu Val

85 90 95
 Asn Gly Trp Thr Val Glu Phe Val Arg Val Asp Pro
 100 105

<210> 865
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 865
 acgcgtcatc ctcattcaag aggcccagga ggagcaccac cctccgcata ttgcgcgtgc
 60
 agctctcggt ctggtctctg agcatgccca cggcgctctg cacacagctt ctcagcagcc
 120
 tgggtggtgtc caggatcgac acatcactgc ctccgagttc agaggtttcc tttcccacct
 180
 tctcagaact ttctgtttcc atggcctcct ctgccacctc tgccacctcc cctgatgtgc
 240
 tggcctccgt ctccatcgcc tcctcatggc cgtcttccgc ccggtgttcc aagcccagct
 300
 caggcaagtc tccgggcgcg aacagctggc tgatggtgac atgctgcagc ctggtcacat
 360
 cagaaaccat gaggggtggat ctccggaggt catcgatgtg gacagactgc cacagccctc
 420
 cgtggaagcc cacataggct gttcctcttc ccacccggga cagttttgtg atgaaataga
 480
 cgaagatacg gtcctcattt tctcgtattt tggtgatttc atttataaca gaatacttag
 540
 ctgaggcaat gagctgggcg ctacggattc catcttcaaa atctgtctga aaaatgagga
 600
 ttttacattt ggctgtattc gttaaacagt ttcggacttc tttgaggaat gagtactcgg
 660
 tgtcaaactg ctgcagccac aggagtgtgg gtttcggagc cctgcctgtg acctctgatt
 720
 ctaaaattt
 729

<210> 866
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 866
 Ala Cys Pro Arg Arg Ser Ala His Ser Phe Ser Ala Ala Trp Trp Cys
 1 5 10 15
 Pro Gly Ser Thr His His Cys Leu Arg Val Gln Arg Phe Pro Phe Pro
 20 25 30
 Pro Ser Gln Asn Phe Leu Phe Pro Trp Pro Pro Leu Pro Pro Leu Pro
 35 40 45
 Pro Pro Leu Met Cys Trp Pro Pro Ser Pro Ser Pro Pro His Gly Arg
 50 55 60
 Leu Pro Pro Gly Val Pro Ser Pro Ala Gln Ala Ser Leu Arg Ala Arg
 65 70 75 80
 Thr Ala Gly

<210> 867
 <211> 640
 <212> DNA
 <213> Homo sapiens

<400> 867
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 60
 tcagggtggac tctcgttggt ggccggcgtc gctggccccc tcgcacccgg tcccgtgtca
 120
 catgctccag ggccgcagctc ttgtccacct ttacctcacc gaaagccttg tttttgcctc
 180
 ggttaatccc ttcattgagg gctttgatcc aggattcctt ctctctcccg gtgggtgcct
 240
 ggaatttgat gtcgctgacc ttgttccttg gggatcgag caggataaag cgggtgtttc
 300
 gcttgaggag ggcacgaagg tcctggcact tctcatagct gccagctcc acagtctcca
 360
 cacacttctg atcatcctca ttctcataga ccagcagctg ggcttggcag aggagcagat
 420
 atcgggtctt ccagaaaccc aggaggcccc cactgctctt cttgatccag ccagccttgt
 480
 ccaccatctg tgctccccga ggcttctcac cggcttcctt cacacctcc tcctccatgg
 540
 cgagtccgcc gaggtccgc cgtccgccca ctgcttcca gcgccgcgc ggctctgcc
 600
 ccgcgtctac gcccgccag gcggcgactc tccgcgttct
 640

<210> 868
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 868
 Gly Gly His Glu Gly Pro Gly Thr Ser His Ser Cys Pro Ala Pro Gln
 1 5 10 15
 Ser Pro His Thr Ser Asp His Pro His Ser His Arg Pro Ala Ala Gly
 20 25 30
 Pro Gly Arg Gly Ala Asp Ile Gly Leu Ser Arg Asn Pro Gly Gly Pro
 35 40 45
 His Cys Ser Ser
 50

<210> 869
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 869
 ngggtgatgc tgctcgcggc attgagcacc tttgtgctca gcgcgctgtt tategacaac
 60

ttcctgtcgc cgtgaatat gcgcgggctg ggcctggcga tttcgacggg gggcatcgct
 120
 gcgtgcacca tgctgttctg cctggcgctg gggcatttcg acttgctcggg gggctcgggtg
 180
 atcgccctgtg ccggtgtggg cgcgggggatt gtgattcgtg acaccgatag cgtggcactc
 240
 ggcgtgtccg ctgcgttggc catgggcctg gtagtggggc tgatcaacgg catcgtgatc
 300
 gccaaagtgc gcatcaacgc g
 321

<210> 870
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 870
 Xaa Val Met Leu Leu Ala Ala Leu Ser Ile Phe Val Leu Ser Ala Leu
 1 5 10 15
 Phe Ile Asp Asn Phe Leu Ser Pro Leu Asn Met Arg Gly Leu Gly Leu
 20 25 30
 Ala Ile Ser Thr Val Gly Ile Ala Ala Cys Thr Met Leu Phe Cys Leu
 35 40 45
 Ala Ser Gly His Phe Asp Leu Ser Val Gly Ser Val Ile Ala Cys Ala
 50 55 60
 Gly Val Val Ala Gly Ile Val Ile Arg Asp Thr Asp Ser Val Ala Leu
 65 70 75 80
 Gly Val Ser Ala Ala Leu Ala Met Gly Leu Val Val Gly Leu Ile Asn
 85 90 95
 Gly Ile Val Ile Ala Lys Leu Arg Ile Asn Ala
 100 105

<210> 871
 <211> 320
 <212> DNA
 <213> Homo sapiens

<400> 871
 agatcttcag agtcctcgtc ttttaaattgg gggtaacagc agcaagtcct cagaggtgtc
 60
 ctgagcctca aaacacatcc tggtttgtaa cgtccgcagc ctcagcaggg gctaggcaca
 120
 gaacaagcat tcaggacctg gaaggtacca gcgacacctg gtcctccctt cccaggcaca
 180
 aggcagcccc tctccattca agctctgccc cagcccagca aagagagggg tcttcagcca
 240
 ctgccccac cactaccaca atcatactca cctctcctgg tccatacgtg acaaaggacc
 300
 tgccacggcc agggagacaa
 320

<210> 872
 <211> 98
 <212> PRT

<213> Homo sapiens

<400> 872

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Met Gly Val Thr Ala Ala Ser Pro Gln Arg Cys Pro Glu Pro Gln Asn
 1           5           10           15
Thr Ser Trp Phe Val Thr Ser Ala Ala Ser Ala Gly Ala Arg His Arg
 20           25           30
Thr Ser Ile Gln Asp Leu Glu Gly Thr Ser Asp Thr Trp Ser Ser Leu
 35           40           45
Pro Arg His Lys Ala Ala Pro Leu His Ser Ser Ser Ala Pro Ala Gln
 50           55           60
Gln Arg Glu Gly Ser Ser Ala Thr Ala Pro Thr Thr Thr Thr Ile Ile
 65           70           75           80
Leu Thr Ser Pro Gly Pro Tyr Val Thr Lys Asp Leu Pro Arg Pro Gly
 85           90           95
Arg Gln

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<210> 873

<211> 363

<212> DNA

<213> Homo sapiens

<400> 873

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nttgtttagc atcgtttttt acgggtgtat cagcgcgttt agcagcgttt ttagcggatg
60
catcagcatg ttttgcgtca cgttttacia ctgtgctacc gtgttttagca tcatttttga
120
cggaggtatc aatacgttta gcatcgtttt taacagatgt atcaacacgg ggttcacccg
180
ctttagcaga atccccagct ctagtagcca ctttagatac ttcagatttt atatgagtcg
240
cagttgtttc agcgtgagcc atgctgaatg tagaaccaag ggccaatgta attgctaaag
300
acaaagataa tttatttagt ttcattgttc gagagaagtg tgcgaattcg gcgatacagt
360
cag
363

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<210> 874

<211> 108

<212> PRT

<213> Homo sapiens

<400> 874

```

Met Lys Leu Asn Lys Leu Ser Leu Ser Leu Ala Ile Thr Leu Ala Leu
 1           5           10           15
Gly Ser Thr Phe Ser Met Ala His Ala Glu Thr Thr Ala Thr His Ile
 20           25           30
Lys Ser Glu Val Ser Lys Val Ala Thr Arg Ala Gly Asp Ser Ala Lys
 35           40           45
Ala Asp Glu Pro Arg Val Asp Thr Ser Val Lys Asn Asp Ala Lys Arg
 50           55           60
Ile Asp Thr Ser Val Lys Asn Asp Ala Lys His Gly Ser Thr Val Val

```

65 70 75 80
 Lys Arg Asp Ala Lys His Ala Asp Ala Ser Ala Lys Asn Ala Ala Lys
 85 90 95
 Arg Ala Asp Thr Pro Val Lys Asn Asp Ala Lys Gln
 100 105

<210> 875
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 875
 acgcgtgaag gggaccctaa ctcgtctggg ctgtaggatg cgggcgagge ttccacaaac
 60
 tcactgtctg ggggagaaga aaagcagaaa acaactcgaa tcgctaccat tcaggacgaa
 120
 cccgccaaagc accagctcaa gcgcaggtcc cggggaaaaa gcgcgggctt ctctctccca
 180
 gcgctcagaa tccctgagcc ggaggccccg cgggattcag accgccagat cccagggag
 240
 tgacaaatcg ccgcagaaac ttgggggaca actcgccctt ggcaccgcgc ggcttccagg
 300
 cgcgggcagg cgcgcgccaa ctttccccgc gtgccacccc gcggctcccc cggen
 355

<210> 876
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 876
 Met Arg Ala Arg Leu Pro Gln Thr His Cys Leu Gly Glu Lys Lys Ser
 1 5 10 15
 Arg Lys Gln Leu Glu Ser Leu Pro Phe Arg Thr Asn Pro Pro Ser Thr
 20 25 30
 Ser Ser Ser Ala Gly Pro Arg Glu Lys Ala Arg Ala Ser Leu Ser Gln
 35 40 45
 Arg Ser Glu Ser Leu Ser Arg Arg Pro Arg Gly Ile Gln Thr Ala Arg
 50 55 60
 Ser Pro Gly Ser Asp Lys Ser Pro Gln Lys Leu Gly Gly Gln Leu Gly
 65 70 75 80
 Pro Gly Thr Ala Arg Leu Pro Gly Ala Gly Arg Arg Ala Pro Thr Phe
 85 90 95
 Pro Ala Cys His Pro Ala Ala Pro Pro Ala
 100 105

<210> 877
 <211> 487
 <212> DNA
 <213> Homo sapiens

<400> 877
 acgcgtactt tgggtaatga actgacgacc gctgagatcg actgccttta tctgtgttac
 60

caatccacct atgctaaacg tggtcagcaa gggtatctca cagagaatt ctttggttg
 120
 ttggccaata ccatgggaga tcaaatacctt ttagtacagg cgtacagaga aggcgaagcg
 180
 atcgccgcgt cgtggtgttt ctttgatgat cattcactat atgggcgtta ttggggctgt
 240
 atggaagaag tggattgcct gcattttgaa gcttggttatt accaaggaat cgagttttgt
 300
 ctcgaaaaag gggtacagca tttcgatccg ggtacacaag gggaacacaa gattgcgcgc
 360
 ggctttgaac ctgttttttag ccacagcgtg cattacattg ctcataagg ttttcgtgaa
 420
 gcgattggga atttctgtga ggaagaagcg caagctgtgc gcgagtatca tcaagatacc
 480
 cacgcgt
 487

<210> 878
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 878
 Thr Arg Thr Leu Gly Asn Glu Leu Thr Thr Ala Glu Ile Asp Cys Leu
 1 5 10 15
 Tyr Leu Cys Tyr Gln Ser Thr Tyr Ala Lys Arg Gly Gln Gln Gly Tyr
 20 25 30
 Leu Thr Arg Glu Phe Phe Gly Leu Leu Ala Asn Thr Met Gly Asp Gln
 35 40 45
 Ile Leu Leu Val Gln Ala Tyr Arg Glu Gly Glu Ala Ile Ala Ala Ser
 50 55 60
 Trp Cys Phe Phe Asp Asp His Ser Leu Tyr Gly Arg Tyr Trp Gly Cys
 65 70 75 80
 Met Glu Glu Val Asp Cys Leu His Phe Glu Ala Cys Tyr Tyr Gln Gly
 85 90 95
 Ile Glu Phe Cys Leu Glu Lys Gly Leu Gln His Phe Asp Pro Gly Thr
 100 105 110
 Gln Gly Glu His Lys Ile Ala Arg Gly Phe Glu Pro Val Phe Ser His
 115 120 125
 Ser Val His Tyr Ile Ala His Gln Gly Phe Arg Glu Ala Ile Gly Asn
 130 135 140
 Phe Cys Glu Glu Glu Ala Gln Ala Val Arg Glu Tyr His Gln Asp Thr
 145 150 155 160
 His Ala

<210> 879
 <211> 993
 <212> DNA
 <213> Homo sapiens

<400> 879
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 60

agccagtcca gtagggctct gacccctcct tcctacagta ctgctaaaaa ttcattggga
 120
 tcaagatcca gtgaatcctt tgggaagtac acatcgccag taatgagtga gcatggggac
 180
 gagcacaggc agctcctctc tcaccaatg caaggccctg gactccgtgc agctacctca
 240
 tccaaccact ctgtggacga gcaactgaag aatactgaca cgcacctcat cgacctggtg
 300
 accaatgaga ttatcaccca aggacctcca gtggactgga atgacattgc tggctctgac
 360
 ctggtgaagg ctgtcattaa agaggagggt ttatggccag tgttgaggtc agacgcgttc
 420
 agtggactga cggccttacc tcggagcacc cttttatttg gacctcgggg gacaggcaaa
 480
 acattattgg gcagatgcat cgctagtcag ctggggggcca catttttcaa aattgccggt
 540
 tctggactag tcgccaaggg gttaggagaa gcagagaaaa ttatccatgc ctcttttctt
 600
 gtggccaggt gtcgccagcc ctcggtgatt tttgttagtg acattgacat gcttctctcc
 660
 tctcaagtga atgaggaaca tagtcagtc agtcggatga gaaccgaatt tctgatgcaa
 720
 ctggacactg tactaacttc ggctgaggac caaatcgtag taatttgtgc caccagtaaa
 780
 ccagaagaaa tagatgaatc ccttcggagg tactttcatga aacgactttt aatcccactt
 840
 cctgacagca cagcgaggca ccagataata gtacaactgc tctcacagca caattactgt
 900
 ctcaatgaca aggagtttgc actgctcgtc cagcgcacag aaggcttttc tggactagat
 960
 gtggctcatt tgtgtcagga agcagtgggt ggc
 993

<210> 880

<211> 331

<212> PRT

<213> Homo sapiens

<400> 880

Xaa	Leu	Ala	Phe	Lys	Pro	Thr	Arg	Gln	Leu	Met	Ser	Ser	Glu	Gln	Gln
1				5				10					15		
Arg	Lys	Phe	Ser	Ser	Gln	Ser	Ser	Arg	Ala	Leu	Thr	Pro	Pro	Ser	Tyr
			20					25					30		
Ser	Thr	Ala	Lys	Asn	Ser	Leu	Gly	Ser	Arg	Ser	Ser	Glu	Ser	Phe	Gly
			35				40					45			
Lys	Tyr	Thr	Ser	Pro	Val	Met	Ser	Glu	His	Gly	Asp	Glu	His	Arg	Gln
			50			55					60				
Leu	Leu	Ser	His	Pro	Met	Gln	Gly	Pro	Gly	Leu	Arg	Ala	Ala	Thr	Ser
65				70						75				80	
Ser	Asn	His	Ser	Val	Asp	Glu	Gln	Leu	Lys	Asn	Thr	Asp	Thr	His	Leu
			85					90						95	
Ile	Asp	Leu	Val	Thr	Asn	Glu	Ile	Ile	Thr	Gln	Gly	Pro	Pro	Val	Asp
			100				105						110		
Trp	Asn	Asp	Ile	Ala	Gly	Leu	Asp	Leu	Val	Lys	Ala	Val	Ile	Lys	Glu

```

      115      120      125
Glu Val Leu Trp Pro Val Leu Arg Ser Asp Ala Phe Ser Gly Leu Thr
      130      135      140
Ala Leu Pro Arg Ser Ile Leu Leu Phe Gly Pro Arg Gly Thr Gly Lys
145      150      155      160
Thr Leu Leu Gly Arg Cys Ile Ala Ser Gln Leu Gly Ala Thr Phe Phe
      165      170      175
Lys Ile Ala Gly Ser Gly Leu Val Ala Lys Gly Leu Gly Glu Ala Glu
      180      185      190
Lys Ile Ile His Ala Ser Phe Leu Val Ala Arg Cys Arg Gln Pro Ser
      195      200      205
Val Ile Phe Val Ser Asp Ile Asp Met Leu Leu Ser Ser Gln Val Asn
      210      215      220
Glu Glu His Ser Pro Val Ser Arg Met Arg Thr Glu Phe Leu Met Gln
225      230      235      240
Leu Asp Thr Val Leu Thr Ser Ala Glu Asp Gln Ile Val Val Ile Cys
      245      250      255
Ala Thr Ser Lys Pro Glu Glu Ile Asp Glu Ser Leu Arg Arg Tyr Phe
      260      265      270
Met Lys Arg Leu Leu Ile Pro Leu Pro Asp Ser Thr Ala Arg His Gln
      275      280      285
Ile Ile Val Gln Leu Leu Ser Gln His Asn Tyr Cys Leu Asn Asp Lys
      290      295      300
Glu Phe Ala Leu Leu Val Gln Arg Thr Glu Gly Phe Ser Gly Leu Asp
305      310      315      320
Val Ala His Leu Cys Gln Glu Ala Val Val Gly
      325      330

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<210> 881
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 881
 cgcgtgagcg tgcacaatgc tccaggaacc ggtgtgtatg aggcggggga ttctaccggt
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 cgtgggtttgc agggcatgcg tgagcgcgcc cgtatccatg gcggcaccgc gcgctggggc
 120
 gactcgcagt attatgaagg cggtttcaac gtcacggtgg agattccaac atgagcggcc
 180
 aaaggatgaa catggacacg acgcgccccca atcacgggtcg gggcttgccg acgatcagcc
 240
 ggctgggtgc gcaccgggttt tgccatggtg ctggattcgc aggacgacat cacggtggcc
 300
 tggcaagccg acn
 313

<210> 882
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 882
 Arg Val Ser Val Asp Asn Ala Pro Gly Thr Gly Val Tyr Glu Ala Gly

1	5	10	15
Asp Ser Thr Gly Arg Gly Leu Gln Gly Met Arg Glu Arg Ala Arg Ile			
	20	25	30
His Gly Gly Thr Ala Arg Trp Gly Asp Ser Gln Tyr Tyr Glu Gly Gly			
	35	40	45
Phe Asn Val Thr Val Glu Ile Pro Thr			
50	55		

<210> 883

<211> 576

<212> DNA

<213> Homo sapiens

<400> 883

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naattaagat ctggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
60
tcctcactga ccaaggcaag ccatgcttct gagtgcttga ggccaccgaa atgaacaaat
120
ggaaaacact cccatctttt tcaagcctac ctttttagcag aagaggcaga tacacaagcc
180
ctaaagatgt aacatcaggc tgagtggagg aaggctgaga agaaaaataa agcaggctca
240
ggaggagaga gtgatgtcag gatgcccttg tgcttactcc agcctccttg tgaaaaccca
300
gctctcctgt ctcccagtga agacttggat ggcagccatc aggggaaggct ggggtcccagc
360
tgggagtatg ggtgtgagct ctatagacca tccctctctg caatcaataa acacttgcct
420
gtgaaagagg cccaagccac catccgcatg gacaccagtg caagtggccc caccgcctg
480
gtcctcagtg actgtgccac cagccatggg agcctgcgca tccaactgct gcataagctc
540
tccttcctgg tgaacgcctt agctaagcag gtcatg
576

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<210> 884

<211> 105

<212> PRT

<213> Homo sapiens

<400> 884

Met Pro Leu Cys Leu Leu Gln Pro Pro Cys Glu Asn Pro Ala Leu Leu			
1	5	10	15
Ser Pro Ser Glu Asp Leu Asp Gly Ser His Gln Gly Arg Leu Gly Pro			
	20	25	30
Ser Trp Glu Tyr Gly Cys Glu Leu Tyr Arg Pro Ser Leu Ser Ala Ile			
	35	40	45
Asn Lys His Leu Pro Val Lys Glu Ala Gln Ala Thr Ile Arg Met Asp			
50	55	60	
Thr Ser Ala Ser Gly Pro Thr Arg Leu Val Leu Ser Asp Cys Ala Thr			
65	70	75	80
Ser His Gly Ser Leu Arg Ile Gln Leu Leu His Lys Leu Ser Phe Leu			
	85	90	95
Val Asn Ala Leu Ala Lys Gln Val Met			

100

105

<210> 885
<211> 370
<212> DNA
<213> Homo sapiens

<400> 885
actagtggcg ccctcatccg ggccgctgtc ccgctctcgg agtcggctgc gttggagtcc
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ggtgaggcga tgctgacgaa cgacacaccg gtgacttggg atggcgggaa agtacggggc
120
aggcgggtgt cgcgcctcgg tgcgacgag ttgtcgtcga ccccggtccg cccagatccg
180
gtacgggctc gccacgtggc gctggaagca gtgaggtctg ggggacttga cgtagcgagc
240
ctgacgaaga acggtgaatc tttgcgacgc cgtcttgccc tggcccatcg ggtgtttggt
300
gatccctggc ccgatgtcag cgatgaggct ctgctagcct gcgccgagga gtggcttgac
360
ctcgacgcgt
370

<210> 886
<211> 123
<212> PRT
<213> Homo sapiens

<400> 886
Thr Ser Gly Ala Leu Ile Arg Ala Ala Val Pro Leu Ser Glu Ser Ala
1 5 10 15
Ala Leu Glu Ser Gly Glu Ala Met Leu Thr Asn Asp Thr Pro Val Thr
20 25 30
Trp Asp Gly Gly Lys Val Arg Gly Arg Arg Val Ser Arg Leu Gly Ala
35 40 45
Ile Glu Leu Ser Ser Thr Pro Val Arg Pro Asp Pro Val Arg Ala Arg
50 55 60
His Val Ala Leu Glu Ala Val Arg Ser Gly Gly Leu Asp Val Ala Ser
65 70 75 80
Leu Thr Lys Asn Gly Glu Ser Leu Arg Arg Arg Leu Ala Leu Ala His
85 90 95
Arg Val Phe Gly Asp Pro Trp Pro Asp Val Ser Asp Glu Ala Leu Leu
100 105 110
Ala Cys Ala Glu Glu Trp Leu Asp Leu Asp Ala
115 120

<210> 887
<211> 447
<212> DNA
<213> Homo sapiens

<400> 887
cagggcggtg cgctcggtcg cgtgctgccg atggatcatgc tcggaggctt aaccgccatc
60

attatctccg gctgcctgaa ccagcttggt aaacgctatc cgcattctgac cggcgaaggc
 120
 caactgatgc caaaccgtgc taatgctgat accacggctt cccaaccggc gttctccggt
 180
 aaagcggacg tgaccacat tgcctccggc gcgttgctgg ccgtgctgct ttacatgggtg
 240
 ggtagggttg ttcacaagtt gattggcctg cctgctccgg ttggcatgtt gtttgtggcg
 300
 gtgctgggtca aactgtgcaa cggcgccttct ccccgctgc tcgaaggctc gcaggtgggt
 360
 tacaaattct tccagacctc cgtcacctat ccgattctgt tcgccgttgg cgtggcgatt
 420
 acgccgtggc aggaactggt caacgcg
 447

<210> 888

<211> 149

<212> PRT

<213> Homo sapiens

<400> 888

Gln	Gly	Val	Ala	Leu	Gly	Arg	Val	Leu	Pro	Met	Val	Met	Leu	Gly	Gly
1				5					10					15	
Leu	Thr	Ala	Ile	Ile	Ile	Ser	Gly	Cys	Leu	Asn	Gln	Leu	Gly	Lys	Arg
			20					25					30		
Tyr	Pro	His	Leu	Thr	Gly	Glu	Gly	Gln	Leu	Met	Pro	Asn	Arg	Ala	Asn
		35					40					45			
Ala	Asp	Thr	Thr	Ala	Ser	Gln	Pro	Ala	Phe	Ser	Gly	Lys	Ala	Asp	Val
	50					55					60				
Thr	Thr	Ile	Ala	Ser	Gly	Ala	Leu	Leu	Ala	Val	Leu	Leu	Tyr	Met	Val
65					70					75				80	
Gly	Arg	Leu	Val	His	Lys	Leu	Ile	Gly	Leu	Pro	Ala	Pro	Val	Gly	Met
			85					90					95		
Leu	Phe	Val	Ala	Val	Leu	Val	Lys	Leu	Cys	Asn	Gly	Ala	Ser	Pro	Arg
		100						105					110		
Leu	Leu	Glu	Gly	Ser	Gln	Val	Val	Tyr	Lys	Phe	Phe	Gln	Thr	Ser	Val
		115					120					125			
Thr	Tyr	Pro	Ile	Leu	Phe	Ala	Val	Gly	Val	Ala	Ile	Thr	Pro	Trp	Gln
	130					135					140				
Glu	Leu	Val	Asn	Ala											
145															

<210> 889

<211> 450

<212> DNA

<213> Homo sapiens

<400> 889

ggtaccaccc cacacctgac aagaggtggc cagggaggaa gggagggttc ttacctcccc
 60
 atctcccctc agtaaaattc aggatgccca gtgaagtttg aatgtcagat aaacaatttg
 120
 ttagtataag gatgtacctc gcattgaaat gatgccttgt aatttactaa atctgcaact
 180

atgcagcctt atttcattggc gggcagtgcc ggtgatccca ggtttcaggg gcggggaagg
 240
 gtgctgggga gaccttgagg tcaggaaccc gtacacctct gcttctgccc tctcttcctt
 300
 gtgccggcca caaggcaatg actcctgtgt gggcgcagag gcagaaatgg gtctggaagg
 360
 ggattcccag tgcctggcaa gttctggtaa attctgcatt ggagggtctc tctgtagtaa
 420
 ggggagttgg cctggccgcc cttcacgcgt
 450

<210> 890
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 890
 Met Met Pro Cys Asn Leu Leu Asn Leu Gln Leu Cys Ser Leu Ile Ser
 1 5 10 15
 Trp Arg Ala Val Ala Val Ile Pro Gly Phe Arg Gly Gly Glu Gly Cys
 20 25 30
 Trp Gly Asp Pro Glu Val Arg Asn Pro Tyr Thr Ser Ala Ser Ala Leu
 35 40 45
 Ser Ser Leu Cys Arg Pro Gln Gly Asn Asp Ser Cys Val Gly Ala Glu
 50 55 60
 Ala Glu Met Gly Leu Glu Gly Asp Ser Gln Cys Leu Ala Ser Ser Gly
 65 70 75 80
 Lys Phe Cys Ile Gly Gly Ser Leu Cys Ser Lys Gly Ser Trp Pro Gly
 85 90 95
 Arg Pro Ser Arg
 100

<210> 891
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 891
 nncaccgtcc ccgtactgga tccgcgcgag gatttcgccg actgcatgca cattgacgta
 60
 ctggatccct tccacactga caacaccagt gagcacagtg acctggccac agatggccag
 120
 actaacggcc cggctgatag cgggactggc acccactctg agcagggaaa ctccgacata
 180
 tctagccccg tcagctctag tgacgctgct aacaccaccg acagcactgc tggcaatacc
 240
 ggtgaaggta ctgccgcgaa tatgcctggt gacatggctc attcttcgac ggctaccac
 300
 ccctatgcaa gcaccggt
 318

<210> 892
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 892

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Xaa Thr Val Pro Val Leu Asp Pro Arg Glu Asp Phe Ala Asp Cys Met
 1           5           10           15
His Ile Asp Val Leu Asp Pro Phe His Thr Asp Asn Thr Ser Glu His
          20           25           30
Ser Asp Leu Ala Thr Asp Gly Gln Thr Asn Gly Pro Ala Asp Ser Gly
          35           40           45
Thr Gly Thr His Ser Glu Gln Gly Asn Ser Asp Ile Ser Ser Pro Val
          50           55           60
Ser Ser Ser Asp Ala Ala Asn Thr Thr Asp Ser Thr Ala Gly Asn Thr
65           70           75           80
Gly Glu Gly Thr Ala Ala Asn Met Pro Gly Asp Met Ala His Ser Ser
          85           90           95
Thr Ala Thr His Pro Tyr Ala Ser Thr Gly
          100          105

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<210> 893

<211> 510

<212> DNA

<213> Homo sapiens

<400> 893

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nnggaccta tccctgaatc taagggttggt gacacatgtg tttgggatag caaggtagag
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aagtcacaga aaaagcctgt ggaaaacagg atgaaggagg acaaaagcag catcagggaa
120
gcaatcagca aagccaagag tacagcaaata ataaagacag aacaggaagg tgaggcatct
180
gagaagagct tgcattctgag cccacagcat atcacacacc agactatgcc tataggacag
240
agaggcagtg agcaaggcaa acgtgtggag aacattaatg gaacctccta ccctagtcta
300
cagcagaaaa ccaatgctgt taagaaatta cataaatgtg atgaatgtgg gaaatccttc
360
aaatataatt cccgccttgt tcaacataaa attatgcaca ctggggaaaa gcgctatgaa
420
tgtgatgact gtggagggac tttccggagc agctcgagcc ttcgggtcca caaacggatc
480
cacactgggt acggagagaa gacaacgcgt
510

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<210> 894

<211> 170

<212> PRT

<213> Homo sapiens

<400> 894

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Xaa Asp Pro Ile Pro Glu Ser Lys Val Gly Asp Thr Cys Val Trp Asp
 1           5           10           15
Ser Lys Val Glu Lys Ser Gln Lys Lys Pro Val Glu Asn Arg Met Lys
          20           25           30
Glu Asp Lys Ser Ser Ile Arg Glu Ala Ile Ser Lys Ala Lys Ser Thr

```

35					40					45					
Ala	Asn	Ile	Lys	Thr	Glu	Gln	Glu	Gly	Glu	Ala	Ser	Glu	Lys	Ser	Leu
50					55					60					
His	Leu	Ser	Pro	Gln	His	Ile	Thr	His	Gln	Thr	Met	Pro	Ile	Gly	Gln
65					70					75					80
Arg	Gly	Ser	Glu	Gln	Gly	Lys	Arg	Val	Glu	Asn	Ile	Asn	Gly	Thr	Ser
85					90					95					
Tyr	Pro	Ser	Leu	Gln	Gln	Lys	Thr	Asn	Ala	Val	Lys	Lys	Leu	His	Lys
100					105					110					
Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Arg	Leu	Val	Gln
115					120					125					
His	Lys	Ile	Met	His	Thr	Gly	Glu	Lys	Arg	Tyr	Glu	Cys	Asp	Asp	Cys
130					135					140					
Gly	Gly	Thr	Phe	Arg	Ser	Ser	Ser	Ser	Leu	Arg	Val	His	Lys	Arg	Ile
145					150					155					160
His	Thr	Gly	Tyr	Gly	Glu	Lys	Thr	Thr	Arg						
165					170										

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<210> 895
<211> 1119
<212> DNA
<213> Homo sapiens
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<400> 895
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120
ccgcaccgga atcgggcttt tcttggggct gccttcttaa atgcggtgtc ctcttgtctg
180
aggcctggcc tggcggcggt ggagcagacc gtcgatcggc ggatggcaat cctggccttg
240
gtccgatcag tgcggggatgg gggccgggca gttatcgtcg ggccttcgga ggacgcgcgc
300
ttgcaggcca tggttcgaaa tgatccagtc ggggtgggcga cacgtgaact cgccgatcgt
360
cgggaggcac atttcccgcc cgcggtgccg tgcggaattg tcgacggtga cccgaaagcg
420
gtggctacag cggcacagcg actacgcgag tggttcggaa ccgaccttga gatgcttggc
480
ccagctccac aaccacgccg tgccagcgaa tcggaacggg atcgaattat cgtgcgtcct
540
cgtagcacga tgcctctcgc cgagcttttc cagggctctat ttcggtctacg ttccaaacac
600
actatgagcc gcgaaccagg aagcttacgc gtggtcatcg acccggccaa cttgttgtga
660
ggtcggtagg cttgcggtgt gagacttctt tttgctggta ccccggaact ggccgtccca
720
acgcttaccg ccttggttagc cgatccccgt cagcaggtag ctgccgtcct gacgcgtccg
780
gatgcagcag taggacggca ccgtactcca cgtccatgcc cggtcgccaa ggctgccgag
840
gaactcggtg tccccgccat taaggcgacc agcgtgaagt ccggcgaggg tcacgatgcc
900

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gtcacttccc tcgatgtcga cgtagccgtc gtcgtagcct acggaggtct cattccccgcc
 960
 gatctgctgg cagtaccacg acacggctgg attaacctac acttttctct cctaccgcga
 1020
 tggcgcgggc ctgctcccat acaacggggc atcatggcgg gggatgagga gacgggcgct
 1080
 tgtgtctttc agctagttga aagcctcgat gccggaccg
 1119

<210> 896

<211> 147

<212> PRT

<213> Homo sapiens

<400> 896

Val	Arg	Leu	Leu	Phe	Ala	Gly	Thr	Pro	Asp	Val	Ala	Val	Pro	Thr	Leu
1				5					10					15	
Thr	Ala	Leu	Val	Ala	Asp	Pro	Arg	His	Glu	Val	Ala	Ala	Val	Leu	Thr
		20					25						30		
Arg	Pro	Asp	Ala	Ala	Val	Gly	Arg	His	Arg	Thr	Pro	Arg	Pro	Cys	Pro
		35					40					45			
Val	Ala	Lys	Ala	Ala	Glu	Glu	Leu	Gly	Ile	Pro	Ala	Ile	Lys	Ala	Thr
		50				55					60				
Ser	Val	Lys	Ser	Gly	Glu	Gly	His	Asp	Ala	Val	Thr	Ser	Leu	Asp	Val
65				70					75					80	
Asp	Val	Ala	Val	Val	Val	Ala	Tyr	Gly	Gly	Leu	Ile	Pro	Ala	Asp	Leu
			85					90						95	
Leu	Ala	Val	Pro	Arg	His	Gly	Trp	Ile	Asn	Leu	His	Phe	Ser	Leu	Leu
		100					105						110		
Pro	Arg	Trp	Arg	Gly	Ala	Ala	Pro	Ile	Gln	Arg	Ala	Ile	Met	Ala	Gly
		115				120					125				
Asp	Glu	Glu	Thr	Gly	Ala	Cys	Val	Phe	Gln	Leu	Val	Glu	Ser	Leu	Asp
	130					135					140				
Ala	Gly	Pro													
145															

<210> 897

<211> 384

<212> DNA

<213> Homo sapiens

<400> 897

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 gacgactacc tcgtccagct gtcgaaggaa gggctcgaga cccgtctcgc gcagctgtat
 120
 ccggctcgaag cccgacgcga cgcgcagcgc gacacctact acaagcgcct cgaattcgag
 180
 tgcgggacca tcacgaagat gggctttccc ggctacttcc tgatcgctgc ggacttcac
 240
 aactgggcaa agaacaacgg cgtgccggtc ggcccgggccc gcggctcggg cgccgggttcg
 300
 ctggctcgct atgcgctcgg cattaccgat ctccaagtac tgcgctacga cctgctgttc
 360

gagcgcttcc tgaacccgga acgc
384

<210> 898

<211> 128

<212> PRT

<213> Homo sapiens

<400> 898

Glu	Leu	Glu	Ala	Gly	Lys	Pro	Glu	Val	Pro	Leu	Phe	Pro	Thr	Pro	Asp
1				5					10					15	
Gly	Met	Ser	Leu	Asp	Asp	Tyr	Leu	Val	Gln	Leu	Ser	Lys	Glu	Gly	Leu
			20					25					30		
Glu	Thr	Arg	Leu	Ala	Gln	Leu	Tyr	Pro	Val	Glu	Ala	Arg	Arg	Asp	Ala
		35					40					45			
Gln	Arg	Asp	Thr	Tyr	Tyr	Lys	Arg	Leu	Glu	Phe	Glu	Cys	Gly	Thr	Ile
	50					55				60					
Thr	Lys	Met	Gly	Phe	Pro	Gly	Tyr	Phe	Leu	Ile	Val	Ala	Asp	Phe	Ile
65				70				75					80		
Asn	Trp	Ala	Lys	Asn	Asn	Gly	Val	Pro	Val	Gly	Pro	Gly	Arg	Gly	Ser
			85				90						95		
Gly	Ala	Gly	Ser	Leu	Val	Ala	Tyr	Ala	Leu	Gly	Ile	Thr	Asp	Leu	Glu
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<210> 899

<211> 6171

<212> DNA

<213> Homo sapiens

<400> 899

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<211> 734

<212> PRT

<213> Homo sapiens

<400> 900

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Leu	Gln	Leu	Leu	Tyr	Leu	Thr	Asn	Asn	Leu	Leu	Thr	Asp	Gln	Cys	Ile
		35					40					45			
Pro	Val	Leu	Val	Gly	His	Leu	His	Leu	Arg	Ile	Leu	His	Leu	Ala	Asn
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Leu	Glu	Glu	Leu	Asn	Leu	Ser	Gly	Asn	Lys	Leu	Lys	Thr	Ile	Pro	Thr
			85					90					95		
Thr	Ile	Ala	Asn	Cys	Lys	Arg	Leu	His	Thr	Leu	Val	Ala	His	Ser	Asn
			100					105					110		
Asn	Ile	Ser	Ile	Phe	Pro	Glu	Ile	Leu	Gln	Leu	Pro	Gln	Ile	Gln	Phe
		115					120					125			
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Leu	Pro	Ala	Thr	Leu	Gln	Asp	Leu	Asp	Leu	Thr	Gly	Asn	Thr	Asn	Leu
145				150					155					160	
Val	Leu	Glu	His	Lys	Thr	Leu	Asp	Ile	Phe	Ser	His	Ile	Thr	Thr	Leu
			165					170					175		
Lys	Ile	Asp	Gln	Lys	Pro	Leu	Pro	Thr	Thr	Asp	Ser	Thr	Val	Thr	Ser
		180						185					190		
Thr	Phe	Trp	Ser	His	Gly	Leu	Ala	Glu	Met	Ala	Gly	Gln	Arg	Asn	Lys

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Ala Val Tyr Gly Met Phe	Asp Gly Asp Arg Asn Glu	Glu Leu Pro Arg
225	230	235
Leu Leu Gln Cys Thr Met	Ala Asp Val Leu Leu Glu	Glu Val Gln Gln
245	250	255
Ser Thr Asn Asp Thr Val	Phe Met Ala Asn Thr Phe	Leu Val Ser His
260	265	270
Arg Lys Leu Gly Met Ala	Gly Gln Lys Leu Gly Ser	Ser Ala Leu Leu
275	280	285
Cys Tyr Ile Arg Pro Asp	Thr Ala Asp Pro Ala Ser	Ser Phe Ser Leu
290	295	300
Thr Val Ala Asn Val Gly	Thr Cys Gln Ala Val Leu	Cys Arg Gly Gly
305	310	315
Lys Pro Val Pro Leu Ser	Lys Val Phe Ser Leu Glu	Gln Asp Pro Glu
325	330	335
Glu Ala Gln Arg Val Lys	Asp Gln Lys Ala Ile Ile	Thr Glu Asp Asn
340	345	350
Lys Val Asn Gly Val Thr	Cys Cys Thr Arg Met Leu	Gly Cys Thr Tyr
355	360	365
Leu Tyr Pro Trp Ile Leu	Pro Lys Pro His Ile Ser	Ser Thr Pro Leu
370	375	380
Thr Ile Gln Asp Glu Leu	Leu Ile Leu Gly Asn Lys	Ala Leu Trp Glu
385	390	395
His Leu Ser Tyr Thr Glu	Ala Val Asn Ala Val Arg	His Val Gln Asp
405	410	415
Pro Leu Ala Ala Ala Lys	Lys Leu Cys Thr Leu Ala	Gln Ser Tyr Gly
420	425	430
Cys Gln Asp Ser Val Gly	Ala Met Val Val Tyr Leu	Asn Ile Gly Glu
435	440	445
Glu Gly Cys Thr Cys Glu	Met Asn Gly Leu Thr Leu	Pro Gly Pro Val
450	455	460
Gly Phe Ala Ser Thr Thr	Thr Thr Ile Lys Asp Ala	Pro Lys Pro Ala Thr
465	470	475
Pro Ser Ser Ser Ser Gly	Ile Ala Ser Glu Phe Ser	Ser Ser Glu Met Ser
485	490	495
Thr Ser Glu Val Ser Ser	Glu Val Gly Ser Thr Ala	Ser Asp Glu His
500	505	510
Asn Ala Gly Gly Leu Asp	Thr Ala Leu Leu Pro Arg	Pro Glu Arg Arg
515	520	525
Cys Ser Leu His Pro Thr	Pro Thr Ser Gly Leu Phe	Gln Arg Gln Pro
530	535	540
Ser Ser Ala Thr Phe Ser	Ser Asn Gln Ser Asp Asn	Gly Leu Asp Ser
545	550	555
Asp Asp Asp Gln Pro Val	Glu Gly Val Ile Thr Asn	Gly Ser Lys Val
565	570	575
Glu Val Glu Val Asp Ile	His Cys Cys Arg Gly Arg	Asp Leu Glu Asn
580	585	590
Ser Pro Pro Leu Ile Glu	Ser Ser Pro Thr Leu Cys	Ser Glu Glu His
595	600	605
Ala Arg Gly Ser Cys Phe	Gly Ile Arg Arg Gln Asn	Ser Val Asn Ser
610	615	620
Gly Met Leu Leu Pro Met	Ser Lys Asp Arg Met Glu	Leu Gln Lys Ser

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 Pro Ser Thr Ser Cys Leu Tyr Gly Lys Lys Leu Ser Asn Gly Ser Ile
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 Val Pro Leu Glu Asp Ser Leu Asn Leu Ile Glu Val Ala Thr Glu Val
 660 665 670
 Pro Lys Arg Lys Thr Gly Tyr Phe Ala Ala Pro Thr Gln Met Glu Pro
 675 680 685
 Glu Asp Gln Phe Val Val Pro His Asp Leu Glu Glu Glu Val Lys Glu
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<210> 901
 <211> 309
 <212> DNA
 <213> Homo sapiens

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<210> 902
 <211> 102
 <212> PRT
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 Ile Arg Leu Pro Ser Val Ser Val Val Ser Ser Asp Gly His Leu Trp
 35 40 45
 Ser Phe Gln Arg Leu Met His Trp Val Thr Arg His Cys Lys Arg Pro
 50 55 60
 Gln Ile Ala Gln His His Leu Thr Phe Thr Pro His His Ile Asn Ile
 65 70 75 80
 Asp Ala Arg Arg Ser Lys Ala Asp Ala Thr Phe Arg Ala Ala Ser Ile
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 Gln Lys Thr Pro Leu Met
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<210> 903
 <211> 349
 <212> DNA
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 35 40 45
 Pro Cys His Pro Arg Asp Cys Ser Pro Ile Leu Tyr His His Glu Val
 50 55 60
 Gln Lys Ile Pro Ser Cys Glu Phe Ser Phe Lys Trp Pro Trp Ser Pro
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 <211> 377
 <212> DNA
 <213> Homo sapiens

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<211> 125
<212> PRT
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<400> 906
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35 40 45
His Gly Val Thr Ser Thr Val Val Pro Asn Ile Val Asp Val Glu Leu
50 55 60
Phe Asp Arg Pro Asp Arg Arg His Glu Gly Thr Ile Val Val Ser Val
65 70 75 80
Ala Thr Leu Asn Pro Gly Lys Gly Met Ile Glu Leu Ala Gln Ala Val
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<211> 332
<212> DNA
<213> Homo sapiens

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<210> 908
<211> 106
<212> PRT
<213> Homo sapiens

<400> 908

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Val Pro Gln Gly Thr Phe Ala Glu Arg Ile Arg Ala Gly Ala Ala Gly
          35           40           45
Ile Ala Ala Phe Phe Thr Pro Thr Gly Tyr Gly Thr Ala Val Gln Lys
          50           55           60
Gly Glu Leu Val Leu Lys Tyr Glu Lys Lys Asp Gly Lys Ala Val Pro
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<210> 909

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<212> DNA

<213> Homo sapiens

<400> 909

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<210> 910

<211> 102

<212> PRT

<213> Homo sapiens

<400> 910

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          35           40           45
Arg Glu Ser Arg Gly Cys Val Thr Pro Leu Phe Phe Pro Pro Gln His
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Arg Thr Gly Gly Pro Trp Leu Arg Ile Arg Thr Pro Phe Ala Pro Ala
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His Lys Ala Arg Arg Arg

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<210> 911
 <211> 506
 <212> DNA
 <213> Homo sapiens

<400> 911
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 gaagcctgct gggcccgga accacagagc agcctggcct ttgaaggaga ccctgtggca
 300
 cccctgccc accccaagt ccagccattt cacttcctg gagatgggtgc aaagcaagaa
 360
 aaaaaaaaa atccagtgtt ctcaggtcag ccttcacca gccaggattc atcgtctgat
 420
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 480
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 506

<210> 912
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 912
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 His Leu His His Ser Met Leu Ser Pro Gln Thr Asp Gln Thr Met Asn
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 Pro Gly Trp Trp Lys Ala Asp Leu Arg Thr Leu Asp Phe Phe Phe Phe
 35 40 45
 Leu Ala Leu His His Leu Gln Gly Ser Glu Met Ala Gly Leu Gly Gly
 50 55 60
 Gly Gln Gly Val Pro Gln Gly Leu Leu Gln Arg Pro Gly Cys Ser Val
 65 70 75 80
 Val Pro Gly Pro Ser Arg Leu Arg Phe His Pro Leu Ala His Ser Ser
 85 90 95
 His Gly Arg Thr Pro Ala Pro Val Pro Thr Pro Glu Val Ser Arg Pro
 100 105 110
 Ala Thr Lys Pro Asp Met His Phe Thr Pro Thr Ser His Ala Ala Ser
 115 120 125
 Arg

<210> 913
 <211> 339

<212> DNA

<213> Homo sapiens

<400> 913

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 180
 aacgaggggt accttatcct taccgctaac gtctttgctc tcatgggctt gcgtcagttg
 240
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 339

<210> 914

<211> 113

<212> PRT

<213> Homo sapiens

<400> 914

Arg	Phe	Met	Ala	Trp	Phe	Arg	Arg	Thr	Val	Pro	Ala	Thr	Gly	Asp	Tyr
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Arg	Gly	Thr	Lys	Phe	Phe	Val	Arg	Glu	Asn	Gly	Lys	Thr	Leu	Ala	Thr
			20					25					30		
Ser	Met	Phe	Met	Val	Cys	Val	Ala	Leu	Gly	Ala	Thr	Asp	Leu	Leu	Phe
			35				40					45			
Ala	Leu	Asp	Ser	Ile	Pro	Ala	Ser	Tyr	Gly	Phe	Thr	Asn	Glu	Gly	Tyr
			50				55					60			
Leu	Ile	Leu	Thr	Ala	Asn	Val	Phe	Ala	Leu	Met	Gly	Leu	Arg	Gln	Leu
65					70				75					80	
Tyr	Phe	Leu	Ile	Gly	Ser	Leu	Leu	Glu	Arg	Leu	Val	Tyr	Leu	Ser	Leu
			85					90					95		
Gly	Leu	Val	Val	Ile	Leu	Gly	Phe	Ile	Ala	Leu	Lys	Leu	Ile	Gly	His
			100					105					110		

Ala

<210> 915

<211> 663

<212> DNA

<213> Homo sapiens

<400> 915

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 120
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 180
 gagcagaatg gaaaatcggg acacactttg actggtgatg gtctcaatgg accatcagat
 240

gcaagtgagc agagagtatc catggcatcg tcaggcagct cccagcctga actagtgact
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 360
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 420
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 540
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 660
 tcc
 663

<210> 916
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 916
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 20 25 30
 Thr Pro Val Ile Asn Gly Gln Ser Leu Thr Lys Gly Glu Thr Cys Met
 35 40 45
 Asn Pro Gln Asp Phe Lys Pro Gly Ala Met Val Leu Glu Gln Asn Gly
 50 55 60
 Lys Ser Gly His Thr Leu Thr Gly Asp Gly Leu Asn Gly Pro Ser Asp
 65 70 75 80
 Ala Ser Glu Gln Arg Val Ser Met Ala Ser Ser Gly Ser Ser Gln Pro
 85 90 95
 Glu Leu Val Thr Ile Pro Leu Ile Lys Gly Pro Lys Gly Phe Gly Phe
 100 105 110
 Ala Ile Ala Asp Ser Pro Thr Gly Gln Lys Val Lys Met Ile Leu Asp
 115 120 125
 Ser Gln Trp Cys Gln Gly Leu Gln Lys Gly Asp Ile Ile Lys Glu Ile
 130 135 140
 Tyr His Gln Asn Val Gln Asn Leu Thr His Leu Gln Val Val Glu Val
 145 150 155 160
 Leu Lys Gln Phe Pro Val Gly Ala Asp Val Pro Leu Leu Ile Leu Arg
 165 170 175
 Gly Gly Pro Pro Ser Pro Thr Lys Ser Ala Lys Met Lys Thr Asp Lys
 180 185 190
 Lys Glu Asn Ala Gly Ser Leu Glu Ala Ile Asn Glu Pro Ile Pro Gln
 195 200 205
 Pro Met Pro Phe Pro Pro Ser Ile Ile Arg Ser Gly Ser
 210 215 220

<210> 917
 <211> 615

<212> DNA

<213> Homo sapiens

<400> 917

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 atccgcccgc acgccctcac ggtgcactcc tatcggggcg ctgccttctg tgatcactgc
 240
 ggggagatgc tcttcggcct agtgcgccag ggcctcaagt gcgatggctg cgggctgaac
 300
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 615

<210> 918

<211> 148

<212> PRT

<213> Homo sapiens

<400> 918

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			20					25					30		
Leu	Val	Arg	Ser	Ser	Gly	Asp	Ile	Gln	Glu	Gly	Asp	Leu	Val	Glu	Val
		35					40					45			
Val	Leu	Ser	Ala	Ser	Ala	Thr	Phe	Glu	Asp	Phe	Gln	Ile	Arg	Pro	His
	50					55					60				
Ala	Leu	Thr	Val	His	Ser	Tyr	Arg	Ala	Pro	Ala	Phe	Cys	Asp	His	Cys
65					70					75				80	
Gly	Glu	Met	Leu	Phe	Gly	Leu	Val	Arg	Gln	Gly	Leu	Lys	Cys	Asp	Gly
				85					90					95	
Cys	Gly	Leu	Asn	Tyr	His	Lys	Arg	Cys	Ala	Phe	Ser	Ile	Pro	Asn	Asn
			100					105					110		
Cys	Ser	Gly	Ala	Arg	Lys	Arg	Arg	Leu	Ser	Ser	Thr	Ser	Leu	Ala	Ser
		115				120						125			
Gly	His	Ser	Val	Arg	Leu	Gly	Thr	Ser	Glu	Ser	Leu	Pro	Cys	Thr	Ala
	130					135					140				
Glu	Glu	Glu	Pro												
145															

<210> 919
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 919
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 120
 gaagaagact tcatttcgaa cgcgacccat cgtggcgatc acctgaccgc acagcgcgcc.
 180
 accttcgcca acccgacctt gctcaacgag atggccgtag tcgatggtga agtgaagaaa
 240
 ggctcgcttg cccgcgtgga accggaaggc catgtgatgc gcatgtggga agcc
 294

<210> 920
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 920
 Thr Gly Met Arg Pro Leu Ala Val Leu Gly Asp Asn Ile Thr Thr Asp
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 His Leu Ser Pro Thr Asn Ala Ile Leu Leu Asp Ser Ala Ala Gly Glu
 20 25 30
 Tyr Leu Ala Lys Met Gly Pro Pro Glu Glu Asp Phe Ile Ser Asn Ala
 35 40 45
 Thr His Arg Gly Asp His Leu Thr Ala Gln Arg Ala Thr Phe Ala Asn
 50 55 60
 Pro Thr Leu Leu Asn Glu Met Ala Val Val Asp Gly Glu Val Lys Lys
 65 70 75 80
 Gly Ser Leu Ala Arg Val Glu Pro Glu Gly His Val Met Arg Met Trp
 85 90 95
 Glu Ala

<210> 921
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 921
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 180
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 240
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 300

cacctggatg ccaccacgga gctttctcgt gagattgcct ctctgtggcct gtacccggcc
 360
 gtggatccgc tggcgtcg
 378

<210> 922
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 922
 Thr Arg Leu Arg Ile Ala Leu Thr Gly Leu Thr Met Ala Glu Tyr Phe
 1 5 10 15
 Arg Asp Val Gln Asn Gln Asp Val Leu Leu Phe Ile Asp Asn Ile Phe
 20 25 30
 Arg Phe Ser Gln Ala Gly Ser Glu Val Ser Thr Leu Leu Gly Arg Met
 35 40 45
 Pro Ser Ala Val Gly Tyr Gln Pro Asn Leu Ala Asp Glu Met Gly Gln
 50 55 60
 Leu Gln Glu Arg Ile Thr Ser Thr Arg Gly His Ser Ile Thr Ser Met
 65 70 75 80
 Gln Ala Val Tyr Val Pro Ala Asp Asp Tyr Thr Asp Pro Ala Pro Ala
 85 90 95
 Thr Thr Phe Ala His Leu Asp Ala Thr Thr Glu Leu Ser Arg Glu Ile
 100 105 110
 Ala Ser Arg Gly Leu Tyr Pro Ala Val Asp Pro Leu Ala Ser
 115 120 125

<210> 923
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 923
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 240
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 420
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 480
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 540
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 571

<210> 924
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 924
 Thr Gly Ile Glu Leu Pro Gln Asp Thr Gly Lys His Val Ala Asp Glu
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 Gln Leu Gln Arg Leu Asp Thr Ala Leu Glu His Val Arg Gly Glu Ile
 20 25 30
 Arg Ile Thr Leu Glu His Ala Arg Gln Arg Lys Asn Val Glu Glu Glu
 35 40 45
 Asp Ile Phe Ala Ala His Leu Ala Leu Leu Glu Asp Pro Thr Leu Leu
 50 55 60
 Asp Ala Ala Thr Gly Ala Ile Glu His Gly Ser Ala Ala Thr His Ala
 65 70 75 80
 Trp Arg Asp Ala Ile Gln Ala Gln Cys Ala Val Leu Leu Ala Leu Gly
 85 90 95
 Lys Pro Leu Phe Ala Glu Arg Ala Asn Asp Leu Arg Asp Leu Gln Gln
 100 105 110
 Arg Val Leu Arg Ala Leu Leu Gly Glu Ala Trp His Phe Glu Leu Pro
 115 120 125
 Ala Gly Pro Ile Phe Arg Xaa Ala Ile Asn Leu Pro Pro Ser Ala Leu
 130 135 140
 Leu Gln Leu Ser Ala Gln Asn Ala Val Gly Ile Cys Met Ala Glu Gly
 145 150 155 160
 Gly Ala Thr Ser His Val Ala Ile Leu Ala Arg Gly Lys Gly Leu Pro
 165 170 175
 Cys Val Val Ala Leu Gly Ala Glu Val Leu Asp Val Pro Gln
 180 185 190

<210> 925
 <211> 620
 <212> DNA
 <213> Homo sapiens

<400> 925
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 300
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 480

tgcccagcag catcacacgc actttggtgc ttataaatg catggtcagt gaggtgccca
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<210> 926
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 926
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 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Val Cys Met His Gly Val Cys
 35 40 45
 Thr Cys Ala Leu Cys Val Cys Val Cys Met Cys Val His Val Cys Leu
 50 55 60
 Cys Val Cys Met Val Met Cys Val Cys Thr Val Trp Cys Val Cys Met
 65 70 75 80
 Cys Val His Val Cys Thr Val Tyr Ala
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<210> 927
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 927
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 120
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 180
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 240
 caggtacaac ctggaaaccc caaaggaccc cagatggcaa tgtgacacgg cccatccacc
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 360

<210> 928
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 928
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 Gly Val Leu Phe Arg Ser. Phe Gln Gln Gln Thr Gly His Gly Asp Pro

	20		25		30										
Ile	Ser	Gly	Leu	Cys	Phe	Ser	Gly	Gly	His	Pro	Ala	Ile	Leu	Pro	Thr
	35		40		45										
Ser	Ser	Glu	Ala	Gly	Thr	Lys	Pro	Ser	Gln	Glu	Ala	Ala	Gly	Ser	Lys
	50		55		60										
Gly	Gln	Pro	Ala	Gln	Trp	Gly	Gln	Ala	Gly	Thr	Thr	Trp	Lys	Pro	Gln
65			70		75				80						
Arg	Thr	Pro	Asp	Gly	Asn	Val	Thr	Arg	Pro	Ile	His	Gln	Ala	Pro	Val
			85		90				95						
Met	Pro	Ala	Ser	His	Arg	Gly	Glu	Pro	Asp	Pro	Gly	Thr	Ile	Leu	
	100		105		110										

<210> 929

<211> 2340

<212> DNA

<213> Homo sapiens

<400> 929

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1080

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<210> 930

<211> 702

<212> PRT

<213> Homo sapiens

<400> 930

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Gln	His	Asp	Asn	Ala	Gln	Asn	Phe	Gly	Asn	Gln	Ser	Phe	Glu	Glu	Leu
			20				25						30		
Arg	Ala	Ala	Cys	Leu	Arg	Lys	Gly	Glu	Leu	Phe	Glu	Asp	Pro	Leu	Phe

35	40	45			
Pro Ala Glu Pro Ser Ser Leu Gly Phe Lys Asp Leu Gly Pro Asn Ser					
50	55	60			
Lys Asn Val Gln Asn Ile Ser Trp Gln Arg Pro Lys Asp Ile Ile Asn					
65	70	75	80		
Asn Pro Leu Phe Ile Met Asp Gly Ile Ser Pro Thr Asp Ile Cys Gln					
85	90	95			
Gly Ile Leu Gly Asp Cys Trp Leu Leu Ala Ala Ile Gly Ser Leu Thr					
100	105	110			
Thr Cys Pro Lys Leu Leu Tyr Arg Val Val Pro Arg Gly Gln Ser Phe					
115	120	125			
Lys Lys Asn Tyr Ala Gly Ile Phe His Phe Gln Ile Trp Gln Phe Gly					
130	135	140			
Gln Trp Val Asn Val Val Val Asp Asp Arg Leu Pro Thr Lys Asn Asp					
145	150	155	160		
Lys Leu Val Phe Val His Ser Thr Glu Arg Ser Glu Phe Trp Ser Ala					
165	170	175			
Leu Leu Glu Lys Ala Tyr Ala Lys Leu Ser Gly Ser Tyr Glu Ala Leu					
180	185	190			
Ser Gly Gly Ser Thr Met Glu Gly Leu Glu Asp Phe Thr Gly Gly Val					
195	200	205			
Ala Gln Ser Phe Gln Leu Gln Arg Pro Pro Gln Asn Leu Leu Arg Leu					
210	215	220			
Leu Arg Lys Ala Val Glu Arg Ser Ser Leu Met Gly Cys Ser Ile Glu					
225	230	235	240		
Val Thr Ser Asp Ser Glu Leu Glu Ser Met Thr Asp Lys Met Leu Val					
245	250	255			
Arg Gly His Ala Tyr Ser Val Thr Gly Leu Gln Asp Val His Tyr Arg					
260	265	270			
Gly Lys Met Glu Thr Leu Ile Arg Val Arg Asn Pro Trp Gly Arg Ile					
275	280	285			
Glu Trp Asn Gly Ala Trp Ser Asp Ser Ala Arg Glu Trp Glu Glu Val					
290	295	300			
Ala Ser Asp Ile Gln Met Gln Leu Leu His Lys Thr Glu Asp Gly Glu					
305	310	315	320		
Phe Trp Met Ser Tyr Gln Asp Phe Leu Asn Asn Phe Thr Leu Leu Glu					
325	330	335			
Ile Cys Asn Leu Thr Pro Asp Thr Leu Ser Gly Asp Tyr Lys Ser Tyr					
340	345	350			
Trp His Thr Thr Phe Tyr Glu Gly Ser Trp Arg Arg Gly Ser Ser Ala					
355	360	365			
Gly Gly Cys Arg Asn His Pro Gly Thr Phe Trp Thr Asn Pro Gln Phe					
370	375	380			
Lys Ile Ser Leu Pro Glu Gly Asp Asp Pro Glu Asp Asp Ala Glu Gly					
385	390	395	400		
Asn Val Val Val Cys Thr Cys Leu Val Ala Leu Met Gln Lys Asn Trp					
405	410	415			
Arg His Ala Arg Gln Gln Gly Ala Gln Leu Gln Thr Ile Gly Phe Val					
420	425	430			
Leu Tyr Ala Val Pro Lys Glu Phe Gln Asn Ile Gln Asp Val His Leu					
435	440	445			
Lys Lys Glu Phe Phe Thr Lys Tyr Gln Asp His Gly Phe Ser Glu Ile					
450	455	460			
Phe Thr Asn Ser Arg Glu Val Ser Ser Gln Leu Arg Leu Pro Pro Gly					

465 470 475 480
 Glu Tyr Ile Ile Ile Pro Ser Thr Phe Glu Pro His Arg Asp Ala Asp
 485 490 495
 Phe Leu Leu Arg Val Phe Thr Glu Lys His Ser Glu Ser Trp Glu Leu
 500 505 510
 Asp Glu Val Asn Tyr Ala Glu Gln Leu Gln Glu Glu Lys Val Ser Glu
 515 520 525
 Asp Asp Met Asp Gln Asp Phe Leu His Leu Phe Lys Ile Val Ala Gly
 530 535 540
 Glu Gly Lys Glu Ile Gly Val Tyr Glu Leu Gln Arg Leu Leu Asn Arg
 545 550 555 560
 Met Ala Ile Lys Phe Lys Ser Phe Lys Thr Lys Gly Phe Gly Leu Asp
 565 570 575
 Ala Cys Arg Cys Met Ile Asn Leu Met Asp Lys Asp Gly Ser Gly Lys
 580 585 590
 Leu Gly Leu Leu Glu Phe Lys Ile Leu Trp Lys Lys Leu Lys Lys Trp
 595 600 605
 Met Asp Ile Phe Arg Glu Cys Asp Gln Asp His Ser Gly Thr Leu Asn
 610 615 620
 Ser Tyr Glu Met Arg Leu Val Ile Glu Lys Ala Gly Ile Lys Leu Asn
 625 630 635 640
 Asn Lys Val Met Gln Val Leu Val Ala Arg Tyr Ala Asp Asp Gly Leu
 645 650 655
 Ile Ile Asp Phe Asp Ser Phe Ile Ser Cys Phe Leu Arg Leu Lys Thr
 660 665 670
 Met Phe Thr Phe Phe Leu Thr Met Asp Pro Lys Asn Thr Gly His Ile
 675 680 685
 Cys Leu Ser Leu Glu Gln Trp Leu Gln Met Thr Met Trp Gly
 690 695 700

<210> 931
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 931
 tcgcgaagg agcctgacat gggccagaaa atcaatcccc atggtttccg tctcggtgtg
 60
 acgaccgatc acaagacccg ctggtacgcc gagaagcagt acgccgagct cgtgggtgag
 120
 gatgtcaaga tccgagagtg gctccacaag aatctggagc gcgccggtct ttcgtccatc
 180
 gagatcgagc gtcgctccga gcgcgtgacc attttccttt acgccgctcg cccgggcatc
 240
 gttatcgggc gcaatggccg ggaggccgag cgcgtgcgtn ntgagctcga aaagctt
 297

<210> 932
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 932
 Met Gly Gln Lys Ile Asn Pro His Gly Phe Arg Leu Gly Val Thr Thr

```

      1             5             10             15
Asp His Lys Thr Arg Trp Tyr Ala Glu Lys Gln Tyr Ala Glu Leu Val
      20             25             30
Gly Glu Asp Val Lys Ile Arg Glu Trp Leu His Lys Asn Leu Glu Arg
      35             40             45
Ala Gly Leu Ser Ser Ile Glu Ile Glu Arg Arg Ser Glu Arg Val Thr
      50             55             60
Ile Phe Leu Tyr Ala Ala Arg Pro Gly Ile Val Ile Gly Arg Asn Gly
65             70             75             80
Arg Glu Ala Glu Arg Val Arg Xaa Glu Leu Glu Lys Leu
      85             90

```

<210> 933
 <211> 305
 <212> DNA
 <213> Homo sapiens

```

<400> 933
nnacgcgtcg ccaagctggt gatggccgaa tacaaggggc tcaacgtcat cgtcaaaacc
60
tccgccgata cggcaagcca agccaatgcc gtgcaggata tggcgggggc aggcatacga
120
gcgctggcca tcctgccgac cgacccggat cagctggttt cggcgatcca gcaggtaag
180
gacgacggca agttcgtggc gctggtcgac cgtgcgcctt ccgtcaacga caacacgata
240
cgcgatctct acgtggccgg caacaaccgg gcgctcggcg aagtggcggg caaattcatg
300
ggcga
305

```

<210> 934
 <211> 101
 <212> PRT
 <213> Homo sapiens

```

<400> 934
Xaa Arg Val Ala Lys Leu Leu Met Ala Glu Tyr Lys Gly Leu Asn Val
      1             5             10             15
Ile Val Lys Thr Ser Ala Asp Pro Ala Ser Gln Ala Asn Ala Val Gln
      20             25             30
Asp Leu Ala Gly Ala Gly Ile Asp Ala Leu Ala Ile Leu Pro Thr Asp
      35             40             45
Pro Asp Gln Leu Val Ser Ala Ile Gln Gln Val Lys Asp Asp Gly Lys
      50             55             60
Phe Val Ala Leu Val Asp Arg Ala Pro Ser Val Asn Asp Asn Thr Ile
65             70             75             80
Arg Asp Leu Tyr Val Ala Gly Asn Asn Pro Ala Leu Gly Glu Val Ala
      85             90             95
Gly Lys Phe Met Gly
      100

```

<210> 935
 <211> 333

<212> DNA

<213> Homo sapiens

<400> 935

acgcgtgaag ggctgatgag tgctatgaaa aagccagggg cccgaggaca ctgggggtgga
 60
 caggctcccc tggggaagtc ctcttagaac tgagggatca acactggagg agactgcaag
 120
 ggggtacggga taaatgttcc tgggtgaagga aacagcaggg gcaaaggccc tgcagcagaa
 180
 aggagcgagg ccctttggag taacagaaaag accatgggtga caggagctca gaaagaccac
 240
 tgggtgttaag actataagcc agtggaggcc agattgggga atgggatggg aggggtgctt
 300
 gaagaccatg gtgaggctct cttggtcttt act
 333

<210> 936

<211> 103

<212> PRT

<213> Homo sapiens

<400> 936

Met	Val	Phe	Lys	His	Pro	Ser	His	Pro	Ile	Pro	Gln	Ser	Gly	Leu	His
1			5					10					15		
Trp	Leu	Ile	Val	Leu	Thr	Pro	Val	Val	Phe	Leu	Ser	Ser	Cys	His	His
			20					25					30		
Gly	Leu	Ser	Val	Thr	Pro	Lys	Gly	Leu	Ala	Pro	Phe	Cys	Cys	Arg	Ala
			35				40					45			
Phe	Ala	Pro	Ala	Val	Ser	Phe	Thr	Arg	Asn	Ile	Tyr	Pro	Val	Pro	Leu
			50			55					60				
Ala	Val	Ser	Ser	Ser	Val	Asp	Pro	Ser	Val	Leu	Arg	Gly	Leu	Pro	Gln
					70					75					80
Gly	Ser	Leu	Ser	Thr	Pro	Val	Ser	Ser	Gly	Pro	Trp	Leu	Phe	His	Ser
					85				90					95	
Thr	His	Gln	Pro	Phe	Thr	Arg									
															100

<210> 937

<211> 464

<212> DNA

<213> Homo sapiens

<400> 937

nnnttatctg cggagggggg ggccaccctg cccacactca tgctgcaggc ctccaccgac
 60
 ccggcgggacg acgagctcaa ggatctgttg acggccgacc tcatggacca gcacaacctc
 120
 gaccgtgccc tggcagggtt gcgtgccagt cacgtcatcg acgaagctcg cgccgaggtg
 180
 cagcggcggtg ccgatctcgc ccgtggccat ctgccatcc ttcccgcagg cgatgcccg
 240
 acggcggttg agaccctgtg cgacgaggtg ggttcccggg cggcctgaac cccgaccctg
 300

ccagnctgcg tcccatctcc tggccgggac cgctccagcg tctgctctct gacagctcat
 360
 cgttcttccg acaccaagga gtttctcgtg gcccgtcac tcgatctcat cggcattggc
 420
 cccggcaacc cggactggat caccctggct gccgtcaagg ccan
 464

<210> 938
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 938
 Xaa Leu Ser Ala Glu Gly Val Ala Thr Leu Pro Thr Leu Met Leu Gln
 1 5 10 15
 Ala Ser Thr Asp Pro Ala Asp Asp Glu Leu Lys Asp Leu Leu Thr Ala
 20 25 30
 Asp Leu Met Asp Gln His Asn Leu Asp Arg Ala Leu Ala Gly Leu Arg
 35 40 45
 Ala Ser His Val Ile Asp Glu Ala Arg Ala Glu Val Gln Arg Arg Ala
 50 55 60
 Asp Leu Ala Arg Gly His Leu Ala Ile Leu Pro Ala Gly Asp Ala Arg
 65 70 75 80
 Thr Ala Leu Glu Thr Leu Cys Asp Glu Val Gly Ser Arg Ala Ala
 85 90 95

<210> 939
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 939
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 ggactgctgc cggtcgaggt ggacttcgcc gccacgaaga cccttgccctt gtcgcacggg
 120
 acatggcggg ggatcgaggt tgggtggctat gaaatccatc acgggcgtct gtcgttcgct
 180
 gaggaagctg aagccttcct cgacggcgta cagtcgggtc cggtatgggg gacgatgtgg
 240
 cagggggcat tcgagcacga cgaattccgt cgcacgtggc tggctgacgc ggcccgtcac
 300
 gctggatcat cctggcgctc gcactccgac gagctggggtt atcaggctcg acgcgaggcg
 360
 atgatcgaaa ccctcgccga cgcgt
 385

<210> 940
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 940
 Xaa Thr Ile Leu Asp Pro Asp Gly Gln Glu Thr Thr Pro Gly Ser Val

```

1       5       10       15
Ile Glu Gly Leu Gly Leu Leu Pro Val Glu Val Asp Phe Ala Ala Thr
20       25       30
Lys Thr Leu Ala Leu Ser His Gly Thr Trp Arg Gly Ile Glu Val Gly
35       40       45
Gly Tyr Glu Ile His His Gly Arg Leu Ser Phe Ala Glu Asp Ala Glu
50       55       60
Ala Phe Leu Asp Gly Val His Val Gly Pro Val Trp Gly Thr Met Trp
65       70       75       80
His Gly Ala Phe Glu His Asp Glu Phe Arg Arg Thr Trp Leu Ala Asp
85       90       95
Ala Ala Arg His Ala Gly Ser Ser Trp Arg Pro His Ser Asp Glu Leu
100      105      110
Gly Tyr Gln Ala Arg Arg Glu Ala Met Ile Glu Thr Leu Ala Asp Ala
115      120      125

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<210> 941

<211> 348

<212> DNA

<213> Homo sapiens

<400> 941

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60
gaagccatgc aaaccatggt cgtgctggcc gggctgccgt tctcgggtggt gctgattttc
120
ttcatgttcg gtttgcacaa ggcgatgcgc caggacgtgg ccatggagca ggagcaggca
180
caattggctg aacgtggctg ccgtggtttc agcgagcgcc tgaccgcgct ggacctgcaa
240
ccgagccagg gcaccgtgca acgctttatg gacaaacatg tgacgccggc gttggaacaa
300
gcggcgactg cgttgcgtga tcaagggctg gaagtgcaga ccctgctt
348

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<210> 942

<211> 116

<212> PRT

<213> Homo sapiens

<400> 942

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Ile Phe Trp Ser Ala Val Ile Thr Leu Val Thr Ile Gly Leu Leu Phe
1       5       10       15
Ala Gly Asn Phe Glu Ala Met Gln Thr Met Val Val Leu Ala Gly Leu
20       25       30
Pro Phe Ser Val Val Leu Ile Phe Phe Met Phe Gly Leu His Lys Ala
35       40       45
Met Arg Gln Asp Val Ala Met Glu Gln Glu Gln Ala Gln Leu Ala Glu
50       55       60
Arg Gly Arg Arg Gly Phe Ser Glu Arg Leu Thr Ala Leu Asp Leu Gln
65       70       75       80
Pro Ser Gln Gly Thr Val Gln Arg Phe Met Asp Lys His Val Thr Pro
85       90       95
Ala Leu Glu Gln Ala Ala Thr Ala Leu Arg Asp Gln Gly Leu Glu Val

```


100
Gln Thr Leu Leu
115

105

110

<210> 943
<211> 439
<212> DNA
<213> Homo sapiens

<400> 943
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ctcctctaata gcatcctggg ctcttgctaa ccctgtggga aacaccgtct cttctctcct
120
ttgccctctt ctgtgatcac atcctcactt ctgagcctat ctgcccattc agtcaatccc
180
ccttggttct gggatgctat ttccctggcc gcctccctct aggagtgttt agaaccctca
240
ctgtgggcag aaggaggga agatggctga ggtacctgga aaggacgtg tggatccccg
300
ggcatggaag gaaggaggca ggagagctag aaaaagggat gagatctaata gttccctaag
360
gaacctggct tagtgctggc ccttcacata ctgagacatg gaatccttac tactgttctc
420
tgaggaaaga ggctgttcc
439

<210> 944
<211> 118
<212> PRT
<213> Homo sapiens

<400> 944
Met Ala Gly Ala Glu Gln Ile Glu Gln Asp Leu Val Ser Phe Ser Leu
1 5 10 15
His Phe Val Pro Pro Leu Met His Pro Gly Leu Leu Leu Thr Leu Trp
20 25 30
Glu Thr Pro Ser Leu Leu Ser Phe Ala Leu Phe Cys Asp His Ile Leu
35 40 45
Thr Ser Glu Pro Ile Cys Pro Ser Ser Gln Ser Pro Leu Val Leu Gly
50 55 60
Cys Tyr Phe Pro Gly Arg Leu Pro Leu Gly Val Phe Arg Thr Leu Thr
65 70 75 80
Val Gly Arg Arg Glu Gly Arg Trp Leu Arg Tyr Leu Glu Arg Asp Val
85 90 95
Trp Ile Pro Gly His Gly Arg Lys Glu Ala Gly Glu Leu Glu Lys Gly
100 105 110
Met Arg Ser Asn Val Pro
115

<210> 945
<211> 339
<212> DNA
<213> Homo sapiens

<400> 945
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 60
 gagatggtga tatatatata tactcacaca catatatatg tgtgtgtgtg tatatatgta
 120
 tatatatata gcgtgtacaa caaaacatgc actgtttact cagcaccctg tgtttgtctc
 180
 agcaatagct tttctaaaga actgctacta tttgaaatgg agggggaggg gggtcctgga
 240
 cagagtattg tgcaagttga aagtctctgg atggggctat gtatatecta ccagccaatt
 300
 tgggtgcaaa ttggatttga aggcctgcct ctgtccacn
 339

<210> 946
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 946
 Xaa Ile Arg Glu Ala Phe His Ile Phe Phe Leu Leu Ile Ile Ser Ile
 1 5 10 15
 Ala Leu Tyr Val Glu Met Val Ile Tyr Ile Tyr Thr His Thr His Ile
 20 25 30
 Tyr Val Cys Val Cys Ile Tyr Val Tyr Ile Tyr Ser Val Tyr Asn Lys
 35 40 45
 Thr Cys Thr Val Tyr Ser Ala Pro Arg Val Cys Leu Ser Asn Ser Phe
 50 55 60
 Ser Lys Glu Leu Leu Leu Phe Glu Met Glu Gly Glu Gly Gly Pro Gly
 65 70 75 80
 Gln Ser Ile Val Gln Val Glu Ser Leu Trp Met Gly Leu Cys Ile Ser
 85 90 95
 Tyr Gln Pro Ile Trp Val Gln Ile Gly Phe Glu Gly Leu Pro Leu Ser
 100 105 110
 Thr

<210> 947
 <211> 648
 <212> DNA
 <213> Homo sapiens

<400> 947
 tctagatctg ttctcaggga agctgagatg gagatgagt ggcagcaggt ttatggagt
 60
 ctcgtggcat cacacctgtg cacgggggtg gggaaggagt ggacaggagt ggacaagtca
 120
 agtagtgctg ccggctcaag cgatgcctca gcctttctgc tgtgtgcgaa gctttgcaga
 180
 ggagatgatg cttcaaagt gtccctgttg gggatgagca gccaggcctt tatacactgg
 240
 gacagtcagt catggatacg tggataactt ggaaaccctc atccctggag gtctgagccc
 300

ctggatacca tgcccttctt aggcctggagt tgcctgccctt gtccatttac cataaaaatt
 360
 ggacaagaga ataccaggac acacctgagt ttctcatcgt atgctaaacc tgttcttcca
 420
 cgtacatccc caatgtgtac agccctactt tttctgctg atcaagttca attacttctg
 480
 ctaagatggg gactattctt gcctgctggg ccttggatgc aaggacccca atgttcaggc
 540
 agcctttggg gccttctagc atacgaatca gagcattatc tttagggtgtg gaataagctg
 600
 ccccaaaacc tgttgaagcc agccaggcac tgtgctccct tcacgcgt
 648

<210> 948
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 948
 Met Glu Met Ser Gly Gln Gln Val Tyr Gly Val Leu Val Ala Ser His
 1 5 10 15
 Leu Cys Thr Gly Val Gly Lys Glu Trp Thr Gly Val Asp Lys Ser Ser
 20 25 30
 Ser Ala Ala Gly Ser Ser Asp Ala Ser Ala Phe Leu Leu Cys Ala Lys
 35 40 45
 Leu Cys Arg Gly Asp Asp Ala Ser Lys Leu Ser Leu Leu Gly Met Ser
 50 55 60
 Ser Gln Ala Phe Ile His Trp Asp Ser Gln Ser Trp Ile Arg Gly Tyr
 65 70 75 80
 Ser Gly Asn Pro His Pro Trp Arg Ser Glu Pro Leu Asp Thr Met Pro
 85 90 95
 Phe Leu Gly Trp Ser Cys Cys Pro Cys Pro Phe Thr Ile Lys Ile Gly
 100 105 110
 Gln Glu Asn Thr Arg Thr His Leu Ser Phe Ser Ser Tyr Ala Lys Pro
 115 120 125
 Val Leu Pro Arg Thr Ser Pro Met Cys Thr Ala Leu Leu Phe Ser Ala
 130 135 140
 Asp Gln Val Gln Leu Leu Leu Leu Arg Trp
 145 150

<210> 949
 <211> 661
 <212> DNA
 <213> Homo sapiens

<400> 949
 acgcgtactg gttggctcat tcaactgaaaa tatgatgaca tttaaaggaa atgcaagaat
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 aagtaatgtg gaattttatc acagtgggtca agaaggcttc agggatagca cagatccaag
 120
 atatgctgta acgtttctta acctaggaca gattcaagaa catggctcat cttatattcg
 180
 aggcgtgtgt tttcaccatg gcttctctcc agcaattggg gtatttggga cagatggatt
 240

ggacatagat gacaacatca ttcactttac agtgggggaa ggcataagaa tatgggggaa
 300
 tgccaaccga gtccgagggga atttgattgc actttcgggtt tggccaggaa cctatcagaa
 360
 cagaaaagat ttaagttcaa ctctctggca tgcagcaatt gagataaata gagggaccaa
 420
 tacagtttta cagaataatg tagtggctgg atttggaaga gcaggatacc gcattgatgg
 480
 tgaaccttgc ccaggccagt ttaatcctgt ggaaaagtgg tttgacaatg aagcccatgg
 540
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 660
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 661

<210> 950
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 950
 Met Met Thr Phe Lys Gly Asn Ala Arg Ile Ser Asn Val Glu Phe Tyr
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 His Ser Gly Gln Glu Gly Phe Arg Asp Ser Thr Asp Pro Arg Tyr Ala
 20 25 30
 Val Thr Phe Leu Asn Leu Gly Gln Ile Gln Glu His Gly Ser Ser Tyr
 35 40 45
 Ile Arg Gly Cys Ala Phe His His Gly Phe Ser Pro Ala Ile Gly Val
 50 55 60
 Phe Gly Thr Asp Gly Leu Asp Ile Asp Asp Asn Ile Ile His Phe Thr
 65 70 75 80
 Val Gly Glu Gly Ile Arg Ile Trp Gly Asn Ala Asn Arg Val Arg Gly
 85 90 95
 Asn Leu Ile Ala Leu Ser Val Trp Pro Gly Thr Tyr Gln Asn Arg Lys
 100 105 110
 Asp Leu Ser Ser Thr Leu Trp His Ala Ala Ile Glu Ile Asn Arg Gly
 115 120 125
 Thr Asn Thr Val Leu Gln Asn Asn Val Val Ala Gly Phe Gly Arg Ala
 130 135 140
 Gly Tyr Arg Ile Asp Gly Glu Pro Cys Pro Gly Gln Phe Asn Pro Val
 145 150 155 160
 Glu Lys Trp Phe Asp Asn Glu Ala His Gly Gly Leu Tyr Gly Ile Tyr
 165 170 175
 Met Asn Gln Asp Gly Leu Pro Gly Cys Ser Leu Ile Gln Gly Phe Thr
 180 185 190
 Ile Trp Thr Cys Trp Asp Tyr Gly Ile Tyr Phe Gln Thr Thr Glu Ser
 195 200 205
 Val His
 210

<210> 951
 <211> 2615

<212> DNA

<213> Homo sapiens

<400> 951

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120
agcttcagcc tgactcgggt ggattgtagc ggcctgggccc cccacatcat gccgggtgccc
180
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240
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300
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540
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ccatgccgtg cccaacctcg agacttgccc ctgcgctacc tgagcctgga tgggaaccct
660
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720
gccagcctgc agaggctccc tgagctggcg cccagtggct tccgtgagct accgggcctg
780
caggtcctgg acctgtcggg caaccccaag cttaactggg caggagctga ggtgttttca
840
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900
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1140
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1200
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1440
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ctttttctaac atagcccttt ctttgccatg aggccatgag gcccgccttca tccttttcta
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 1620
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 1680
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 1920
 gggcacattg gttccagcct agccagtttc tcaccctggg ttgggggtccc ccagcatcca
 1980
 gactggaaac ctaccattt tcccctgagc atcctctaga tgctgccccca aggagtgtgt
 2040
 gcagttcttg agcctcatct ggctgggac tccaaggggc ctcttggtt cagtccccac
 2100
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 2220
 ctgtttcctt agtcttcatt ttataaaagt tggtgccttt ttaacggagt gtcactttca
 2280
 accggcctcc cctaccctg ctggccgggg atggagacat gtcatttgta aaagcagaaa
 2340
 aaggttgcat ttgttcactt ttgtaatat gtctggggc tgtgttgggg tggtggggga
 2400
 agctgggcat cagtggccac atgggcatca ggggctggcc ccacagagac ccacagggc
 2460
 agtgagctct gtcttcccc accctgcctag cccatcatct atctaaccgg tccttgattt
 2520
 aataaacact ataaaatgaa gactaaggaa acagcccagg gttcggaagc tgagatgcta
 2580
 ccctgggggt agagcataga catgggtcgg gcaga
 2615

<210> 952

<211> 357

<212> PRT

<213> Homo sapiens

<400> 952

Xaa	Pro	Ala	Pro	Thr	Met	Pro	Trp	Pro	Leu	Leu	Leu	Leu	Ala	Val	
1				5				10					15		
Ser	Gly	Ala	Gln	Thr	Thr	Arg	Pro	Cys	Phe	Pro	Gly	Cys	Gln	Cys	Glu
			20				25						30		
Val	Glu	Thr	Phe	Gly	Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val	Asp
		35				40					45				
Cys	Ser	Gly	Leu	Gly	Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu	Asp
	50				55				60						
Thr	Ala	His	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn	Glu

65 70 75 80
 Ser Val Leu Ala Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu
 85 90 95
 Ser His Asn Leu Leu Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu
 100 105 110
 Arg Tyr Leu Glu Ser Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu
 115 120 125
 Pro Ala Glu Ser Phe Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser
 130 135 140
 His Asn Gln Leu Arg Glu Val Ser Val Ser Ala Phe Thr Thr His Ser
 145 150 155 160
 Gln Gly Arg Ala Leu His Val Asp Leu Ser His Asn Leu Ser Pro Pro
 165 170 175
 Arg Ala Pro Pro His Glu Gly Arg Pro Ala Cys Ala His His Ser Glu
 180 185 190
 Pro Glu Pro Gly Leu Glu Pro Ala Pro Cys Arg Ala Gln Pro Arg Asp
 195 200 205
 Leu Pro Leu Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile
 210 215 220
 Gly Pro Gly Ala Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu
 225 230 235 240
 Ala Ser Leu Gln Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu
 245 250 255
 Leu Pro Gly Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn
 260 265 270
 Trp Ala Gly Ala Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu
 275 280 285
 Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu
 290 295 300
 His Leu Pro Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys
 305 310 315 320
 Arg Arg Leu Val Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser
 325 330 335
 Pro Lys Val Ala Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg
 340 345 350
 Gly Pro Thr Ile Leu
 355

<210> 953

<211> 347

<212> DNA

<213> Homo sapiens

<400> 953

acgcgtgaag ccacccctgt gcgcaggcca gtctcgcggg ggccaccacg gagcgtgtgc
 60
 accacacttt ccccatccct tgatccatca ttgggcggtg aggttttccc atgtcttgac
 120
 tgttgtacct ggcggctctg cggagtaacc gctgcggaca cacagtagga cgggagggag
 180
 aagccattgc gtttcaccct ttcattggccc ttcctttccc cttccaagtg agctctttga
 240
 ggtgagtcac ggagggcagt gtccctctgc atcctgtctg gggttgtcaa atatggccaa
 300

gtgggctcca tcggggcagc gggtaggggtg ggggggtgtct gtcagag
347

<210> 954

<211> 103

<212> PRT

<213> Homo sapiens

<400> 954

[illegible]

<210> 955

<211> 634

<212> DNA

<213> Homo sapiens

<400> 955

acgcgtgaag	ggctctgcag	gtgagcggct	ctgcaggtga	agggttctgc	aggtgagcgg
60					
ctctgcaggt	gaatggttct	gcaggtgaag	ggctctgcag	gtgaacgggt	ctgcaggtga
120					
agggctctgc	aggtgaacgg	ttctgcaggt	gagcggctct	gcaggtgagc	ggctctgcac
180					
gtgagtgcct	ctgtgactgg	ctcgcaagca	gcatttgtgc	acacttgact	ggccacaaca
240					
gaatgttctt	ctctgttgtc	agcactgagg	aggaagctcc	tgccctaagcg	accacagcca
300					
ggcaccgcgt	ccatggagac	attgctctct	ccagactcca	ttcagactca	ggaaacctga
360					
gctcctggaa	tgcaggctga	ggcagctccc	acacaaaagc	tatctactct	ggcagttatc
420					
agaggcctcc	gttgcacaaa	tcacacacct	actgtgcctg	acgtggctgg	gcctccagca
480					
ggaccgcgtc	ctgagaacac	acgggtgcta	gtccaagttc	acagcacggc	tcaagtcact
540					
cccacaaacc	tctctataca	aacacacaaa	gctctgggag	gctaccctgc	atccaagagt
600					
caccatctca	cacctggaac	aagggttacg	gccg		
634					

<210> 956

<211> 113
 <212> PRT
 <213> Homo sapiens

<400> 956
 Met Glu Ser Gly Glu Ser Asn Val Ser Met Glu Arg Val Pro Gly Cys
 1 5 10 15
 Gly Arg Leu Gly Arg Ser Phe Leu Leu Ser Ala Asp Asn Arg Glu Glu
 20 25 30
 His Ser Val Val Ala Ser Gln Val Cys Thr Asn Ala Ala Cys Glu Pro
 35 40 45
 Val Thr Glu Ala Leu Thr Cys Arg Ala Ala His Leu Gln Ser Arg Ser
 50 55 60
 Pro Ala Glu Pro Phe Thr Cys Arg Ala Leu His Leu Gln Asn Arg Ser
 65 70 75 80
 Pro Ala Glu Pro Phe Thr Cys Arg Thr Ile His Leu Gln Ser Arg Ser
 85 90 95
 Pro Ala Glu Pro Phe Thr Cys Arg Ala Ala His Leu Gln Ser Pro Ser
 100 105 110
 Arg

<210> 957
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 957
 acgcgtggcc tgaccaccgt gtcccgccca tctacaggtg cccgagatcg tgagcgtcct
 60
 gcgctccaag cttcaggagg cccagggaga gcacgtcctg ccggccaccc agcacagcgt
 120
 gtacctcctg gccaccacag actgcgcagc cgtggtgtcc agcctcctgg gcagcccctt
 180
 gcccttggaac aggtaccacag ctcagactcc aggcttaggg gtccctctgg aatgatgctc
 240
 cccctggaat gatgctcccc gagecctcca cccggctctg caccctgact ttctgcatga
 300
 gttcccatgg ctgtaggcca cgtgggacag aaagtgcacat ggagccaggc cccagtctct
 360
 caggtaccca cggggacctc tcctctccag gcgttttggg atcctcactg gctccggtgg
 420
 gccctgcaca gcacccccac aggggaagctg ctgtttctgc cttcctctaa ggtcccaaaa
 480
 ctgcctgggt gctctgttgg cccagggctc cagcacacac tggaggctgc ccctcaccct
 540
 gtgtcttggg tccggtact ccaagccttg tcctctgcag ggcattccact gctgcctgtg
 600
 agcagacccc tgggaactgc ctgatctgag cccctcagg agcccaagga caacctgtc
 660
 tgtaccatac atcactatgt cttcccaagc tcacacctcc cagctcccag caaagggcag
 720
 ggcgtgtcta ccaccacca gccactggg gtcccccttc ctgcgcgagg cctccggagc
 780

atgggtctgc tggcccttcc tttctttgcc tcttagtctg gaa
823

<210> 958
<211> 105
<212> PRT
<213> Homo sapiens

<400> 958
Met Ala Val Gly His Val Gly Gln Lys Val Thr Trp Ser Gln Ala Pro
1 5 10 15
Val Ser Gln Val Pro Thr Gly Thr Ser Pro Leu Gln Ala Phe Trp Asp
20 25 30
Pro His Trp Leu Arg Trp Ala Leu His Ser Thr Pro Thr Gly Lys Leu
35 40 45
Leu Phe Leu Pro Ser Ser Lys Val Pro Lys Leu Pro Gly Cys Ser Val
50 55 60
Gly Pro Arg Leu Gln His Thr Leu Glu Ala Ala Pro His Pro Val Ser
65 70 75 80
Trp Phe Arg Leu Leu Gln Ala Leu Ser Ser Ala Gly His Pro Leu Leu
85 90 95
Pro Val Ser Arg Pro Leu Gly Thr Ala
100 105

<210> 959
<211> 586
<212> DNA
<213> Homo sapiens

<400> 959
ngtcatgact gcatggccaa gcatgactcc aacaccatca ttaagtttgc cgacgacaca
60
acagtggtag gcctgatcac cgacaacgat gaggcagcct atagggagga ggtagagagac
120
ctggcagtgt ggtgccagga taacaacctc tccctcaacg tgatcaagac cacgaagatg
180
atcgtggact acaggaaaag gagggctcag caccgccccca ttctcattga tggggctgta
240
tgggagccag ttgagagctt caagttcctt ggtgtccaca tcaccatcga actatcatgg
300
tccaaacaca ccaagacagt agtgaagagg gtgcgacaat gcctattcca cctcggtaga
360
caaaaaagat ttggaatgga tcctcagacc ctcaaaaagt ttgacatcta caccatcgag
420
agcatcatga ctggttgcac caccgcctgg tatggcaact gctcggcctc cgaccgcaag
480
gcactacaga gggtagtgcg tacggcccag tacatcactg gggctaagct tcctgccatc
540
caggacctct ataccaggcg gtgtcagcgg aagaccctga caattg
586

<210> 960
<211> 195
<212> PRT

<213> Homo sapiens

<400> 960

Xaa His Asp Cys Met Ala Lys His Asp Ser Asn Thr Ile Ile Lys Phe
 1 5 10 15
 Ala Asp Asp Thr Thr Val Val Gly Leu Ile Thr Asp Asn Asp Glu Ala
 20 25 30
 Ala Tyr Arg Glu Glu Val Arg Asp Leu Ala Val Trp Cys Gln Asp Asn
 35 40 45
 Asn Leu Ser Leu Asn Val Ile Lys Thr Thr Lys Met Ile Val Asp Tyr
 50 55 60
 Arg Lys Arg Arg Val Glu His Ala Pro Ile Leu Ile Asp Gly Ala Val
 65 70 75 80
 Trp Glu Pro Val Glu Ser Phe Lys Phe Leu Gly Val His Ile Thr Ile
 85 90 95
 Glu Leu Ser Trp Ser Lys His Thr Lys Thr Val Val Lys Arg Val Arg
 100 105 110
 Gln Cys Leu Phe His Leu Gly Arg Gln Lys Arg Phe Gly Met Asp Pro
 115 120 125
 Gln Thr Leu Lys Lys Phe Asp Ile Tyr Thr Ile Glu Ser Ile Met Thr
 130 135 140
 Gly Cys Ile Thr Ala Trp Tyr Gly Asn Cys Ser Ala Ser Asp Arg Lys
 145 150 155 160
 Ala Leu Gln Arg Val Val Arg Thr Ala Gln Tyr Ile Thr Gly Ala Lys
 165 170 175
 Leu Pro Ala Ile Gln Asp Leu Tyr Thr Arg Arg Cys Gln Arg Lys Thr
 180 185 190
 Leu Thr Ile
 195

<210> 961

<211> 502

<212> DNA

<213> Homo sapiens

<400> 961

acgcgttggtc gtctctccgt agaccattca gtttggcaaa acttccactg gagtctgtgc
 60
 atgactggat ggtctctttg acagccctgt caaggaatac caacagaata ttgattctcc
 120
 taaactgtat agtaacctgc taaccagtcg gaaagagcta ccaccaatg gagatactaa
 180
 atccatggta atggaccatc gagggcaacc tccagagttg gctgctcttc ccactcctga
 240
 gtctacaccc gtgcttcacc agaagaccct gcaggccatg aagagccact cagaaaaggc
 300
 ccatggccat ggagcttcaa ggaaagaaac cctcagttt tttccgtcta gtccgccacc
 360
 tcattcccca ataagtcatg ggcataatccc cagtgcatt gttcttccaa atgctaccca
 420
 tgactacaac acgtctttct caaactccaa tgctcacaaa gctgaaaaga agcttcaaaa
 480
 cattgatcac cccttcacgc gt
 502

<210> 962
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 962
 Met Val Met Asp His Arg Gly Gln Pro Pro Glu Leu Ala Ala Leu Pro
 1 5 10 15
 Thr Pro Glu Ser Thr Pro Val Leu His Gln Lys Thr Leu Gln Ala Met
 20 25 30
 Lys Ser His Ser Glu Lys Ala His Gly His Gly Ala Ser Arg Lys Glu
 35 40 45
 Thr Pro Gln Phe Phe Pro Ser Ser Pro Pro Pro His Ser Pro Ile Ser
 50 55 60
 His Gly His Ile Pro Ser Ala Ile Val Leu Pro Asn Ala Thr His Asp
 65 70 75 80
 Tyr Asn Thr Ser Phe Ser Asn Ser Asn Ala His Lys Ala Glu Lys Lys
 85 90 95
 Leu Gln Asn Ile Asp His Pro Phe Thr Arg
 100 105

<210> 963
 <211> 1298
 <212> DNA
 <213> Homo sapiens

<400> 963
 nntcgcgagc acactccagc ctctggggag caggccacag aacgcagggt gaaacccaag
 60
 gcgctctaga ggagatgaat tatggatccg ccctcccgga atcctggctc ggccctcccc
 120
 acgccacca gggccagtcg ggtctgctca cagcccagag aggccgcgtg tccagccgcg
 180
 ggcaagagac agagcaggtc cctgtgtatc caagtccctg agcccgtgac accggcccca
 240
 ggccctgtag agagccagca gccaccatgg cgaaggagga agatgaggag aagaaagcca
 300
 agaaagggaa gaaggggaag aaggcaccgg acccgagaa gcccaaacgg agcctgaagg
 360
 ggacgtcgcg ggtgttcatt ggcttccgcg accgaacacc caagatctac aagaagggcc
 420
 agttccgcag cgcctcggcc ttcttctggg gcctccacac cggccccac aagaccaagc
 480
 gcacgaggaa ggcccgcacc gtgctcgggt acacgtcaga gcttatgacg cacatgcgca
 540
 tgggcaagaa gaagcgggag atgaaggga agaagccgtc cttcatggtg atccgcttcc
 600
 caggccgccc tggtacggc cgcctgcggc cgcgcgccc gtcactcagc aaagcgtcca
 660
 cggccatcaa ctggctcaca aaaaagttcc tcctcaagaa ggccgaggag tcgggcagcg
 720
 aacaggccac agtggacgcc tggctgcagc gctcgagctc ccgcatgggc tcccgcaaac
 780

tcccccttccc gtcgggtgcc gagatcctgc ggcctggggg ccggctccgg aggttcccc
 840
 gcagccgcag catctacgcg tcaggcgagc ccctgggctt cctgcccttc gaggacgagg
 900
 cccattcca tcactcgggc tcccgcaagt cgctgtacgg gcttgagggc ttccaggacc
 960
 tgggcgagta ttatgactat caccgcgacg gcgacgacta ctacgaccgg cagtcactcc
 1020
 accgctacga ggagcaggaa ccctacctgg cgggcctcgg cccctacagc ccggcctggc
 1080
 caccctacgg cgaccactac tacgggtacc cgcccgagga tccctacgac tactaccacc
 1140
 ccgactatta cgggtggcccc gttgatccgg ggtacaccta cggctacggc tacgacgatt
 1200
 acgaaccccc atatgcgccc ccgtcggggg actcgtctcc ttacagctac cacgatgggt
 1260
 acgagggcga ggcgcaccct tatggctact acctggat
 1298

<210> 964

<211> 235

<212> PRT

<213> Homo sapiens

<400> 964

Ser	Ala	Ser	Gln	Ala	Ala	Val	Ala	Thr	Ala	Ala	Cys	Gly	Arg	Ala	Pro
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Gly	His	Ser	Ala	Lys	Arg	Pro	Arg	Pro	Ser	Thr	Gly	Ser	Gln	Lys	Ser
			20					25					30		
Ser	Ser	Ser	Arg	Arg	Pro	Arg	Ser	Arg	Ala	Ala	Asn	Arg	Pro	Gln	Trp
		35					40				45				
Thr	Pro	Gly	Cys	Ser	Ala	Arg	Ala	Pro	Ala	Trp	Ala	Pro	Ala	Asn	Ser
	50					55				60					
Pro	Ser	Arg	Arg	Val	Pro	Arg	Ser	Cys	Gly	Leu	Gly	Ala	Gly	Ser	Gly
65				70					75					80	
Gly	Ser	Pro	Ala	Ala	Ala	Ala	Ser	Thr	Arg	Gln	Ala	Ser	Pro	Trp	Ala
			85					90					95		
Ser	Cys	Pro	Ser	Arg	Thr	Arg	Pro	His	Ser	Ile	Thr	Arg	Ala	Pro	Ala
		100					105					110			
Ser	Arg	Cys	Thr	Gly	Leu	Arg	Ala	Ser	Arg	Thr	Trp	Ala	Ser	Ile	Met
	115					120					125				
Thr	Ile	Thr	Ala	Thr	Ala	Thr	Thr	Thr	Thr	Thr	Gly	Ser	His	Ser	Thr
	130				135						140				
Ala	Thr	Arg	Ser	Arg	Asn	Pro	Thr	Trp	Arg	Ala	Ser	Ala	Pro	Thr	Ala
145				150					155					160	
Arg	Pro	Gly	His	Pro	Thr	Ala	Thr	Thr	Thr	Gly	Thr	Arg	Pro	Arg	
		165					170				175				
Ile	Pro	Thr	Thr	Thr	Thr	Thr	Pro	Thr	Ile	Thr	Val	Ala	Pro	Leu	Ile
	180					185					190				
Arg	Gly	Thr	Pro	Thr	Ala	Thr	Ala	Thr	Thr	Ile	Thr	Asn	Pro	His	Met
	195				200						205				
Arg	Pro	Arg	Arg	Gly	Thr	Arg	Leu	Leu	Thr	Ala	Thr	Thr	Met	Gly	Thr
	210				215					220					
Arg	Ala	Arg	Arg	Thr	Leu	Met	Ala	Thr	Thr	Trp					

225

230

235

<210> 965

<211> 336

<212> DNA

<213> Homo sapiens

<400> 965

nnngtgacca ttatgggtgg tgcccggtacc cgtgaagtgg aaggcgttga ttttggtggc

60

cgggtcagcg atgccgaaaa ggctgaaatc ctccggccgc ccatgtgtga tgctgcccc

120

aataccggcg gtgagagctt tggcattgtc ttggtggaag ccatggcggc aggcgcagcc

180

gttggtgctt cagacttgga ggccttccgc gcagtgtgca acgccgattc cgatgatgtt

240

gccggcgcg tatatcgcaa tgaggatagt aatgaccttg ctctgtgtact caacgagggtg

300

ctcgaggatc ctgagtatcg tgcccgctta gtgcac

336

<210> 966

<211> 112

<212> PRT

<213> Homo sapiens

<400> 966

Xaa Val Thr Ile Met Gly Gly Ala Arg Thr Arg Glu Val Glu Gly Val

1

5

10

15

Asp Phe Val Gly Arg Val Ser Asp Ala Glu Lys Ala Glu Ile Leu Gly

20

25

30

Arg Ala Asp Val Tyr Val Ala Pro Asn Thr Gly Gly Glu Ser Phe Gly

35

40

45

Ile Val Leu Val Glu Ala Met Ala Ala Gly Ala Ala Val Val Ala Ser

50

55

60

Asp Leu Glu Ala Phe Arg Ala Val Cys Asn Ala Asp Ser Asp Asp Val

65

70

75

80

Ala Gly Ala Leu Tyr Arg Asn Glu Asp Ser Asn Asp Leu Ala Arg Val

85

90

95

Leu Asn Glu Val Leu Glu Asp Pro Glu Tyr Arg Ala Arg Leu Val His

100

105

110

<210> 967

<211> 393

<212> DNA

<213> Homo sapiens

<400> 967

ncaaatggca attcatagcc cgccagatcg gacacggagc tgggtggtatc cacggattcg

60

ggcgcgagg cgctgggctc aagctccgct tcggcaccgg tcggcactga ggaatctccg

120

tcggcctccg ctccggccgc agcctgggct gcgccagact ctgcgggagg caccttctcc

180

cgggttcgcc agccaaatgg cggtgcaggc tccagcatcc agtccggtgc cttcggcacc
 240
 cccgcactgc gcagagaggg cgccagaaac gatggcaccg gcggcgcggg aggtgataca
 300
 ggcgcttcgg ccggagcgct cacggactcc ggcactacag gtgcagcttg cgcttcctgc
 360
 ggcgagcaa cagggtcact tcgaggcggg gat
 393

<210> 968
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 968
 Pro Ala Arg Ser Asp Thr Glu Leu Val Val Ser Thr Asp Ser Gly Ala
 1 5 10 15
 Glu Ala Ser Gly Ser Ser Ser Ala Ser Ala Pro Val Gly Thr Glu Glu
 20 25 30
 Ser Pro Ser Ala Ser Ala Ser Ala Ala Trp Ala Ala Pro Asp Ser
 35 40 45
 Ala Gly Gly Thr Phe Ser Arg Val Arg Gln Pro Asn Gly Val Ala Gly
 50 55 60
 Ser Ser Ile Gln Ser Gly Ala Phe Gly Thr Pro Ala Leu Arg Arg Glu
 65 70 75 80
 Ala Ala Arg Asn Asp Gly Thr Gly Gly Ala Gly Gly Asp Thr Gly Ala
 85 90 95
 Ser Ala Gly Ala Leu Thr Asp Ser Gly Thr Thr Gly Ala Ala Cys Ala
 100 105 110
 Ser Cys Gly Gly Ala Thr Gly Ser Leu Arg Gly Gly Asp
 115 120 125

<210> 969
 <211> 880
 <212> DNA
 <213> Homo sapiens

<400> 969
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 ttatccttac atgtattgca gaggatcaat atgaccatgc atttttgcat gatgatcaac
 120
 atgaattttc gagtaaactt acatagaatg cctatgagac acaggaagaa ggcagcagac
 180
 aagaatctta ccctgccgtc tttagtatgt gaagtactgg acctgatggt agagtttatt
 240
 gtaacacaca tgatgaagga gtttcctatg gatctctata tacgctgcat ccaggtagta
 300
 cacaaactgc tctgctacca gaagaagtgt cgggtacgcc tgcattacac ctggcgggag
 360
 ctctggtcag ccttgataaa tttgctgaag ttccttatgt caaatgagac tgtacttttg
 420
 gccaaacaca acattttttac attagccctt atgattgtga acctatttaa tatgtttatc
 480

acatatggcg acacatttct gccaaccccc agcagctatg atgaacttta ctatgagatt
 540
 atccgcatgc accagagctt tgacaacctc tactccatgg tcctgaggct ttctaccaat
 600
 gcaggccagt ggaaggaagc agctagcaag gtgacccatg cattgggttaa tatcagagcc
 660
 atcatcaacc actttaaccc caaaattgag tcctacgctg ctgtgaatca catatcccaa
 720
 ctgtcagagg agcaggtgct ggaggtggtg agagccaact atgacacgct cacgctgaag
 780
 ctgcaggatg gcctggacca gtatgagcgc tactcagagc agcacaagga agctgccttc
 840
 ttcaaagagc tggttcgatc cattagcacc aacgtccgga
 880

<210> 970

<211> 263

<212> PRT

<213> Homo sapiens

<400> 970

Met	Thr	Met	His	Phe	Cys	Met	Met	Ile	Asn	Met	Asn	Phe	Arg	Val	Asn
1				5				10						15	
Leu	His	Arg	Met	Pro	Met	Arg	His	Arg	Lys	Lys	Ala	Ala	Asp	Lys	Asn
			20					25					30		
Leu	Thr	Leu	Pro	Ser	Leu	Val	Cys	Glu	Val	Leu	Asp	Leu	Met	Val	Glu
		35					40					45			
Phe	Ile	Val	Thr	His	Met	Met	Lys	Glu	Phe	Pro	Met	Asp	Leu	Tyr	Ile
	50					55				60					
Arg	Cys	Ile	Gln	Val	Val	His	Lys	Leu	Leu	Cys	Tyr	Gln	Lys	Lys	Cys
65					70					75					80
Arg	Val	Arg	Leu	His	Tyr	Thr	Trp	Arg	Glu	Leu	Trp	Ser	Ala	Leu	Ile
			85					90						95	
Asn	Leu	Leu	Lys	Phe	Leu	Met	Ser	Asn	Glu	Thr	Val	Leu	Leu	Ala	Lys
			100					105						110	
His	Asn	Ile	Phe	Thr	Leu	Ala	Leu	Met	Ile	Val	Asn	Leu	Phe	Asn	Met
		115					120						125		
Phe	Ile	Thr	Tyr	Gly	Asp	Thr	Phe	Leu	Pro	Thr	Pro	Ser	Ser	Tyr	Asp
	130					135					140				
Glu	Leu	Tyr	Tyr	Glu	Ile	Ile	Arg	Met	His	Gln	Ser	Phe	Asp	Asn	Leu
145					150					155					160
Tyr	Ser	Met	Val	Leu	Arg	Leu	Ser	Thr	Asn	Ala	Gly	Gln	Trp	Lys	Glu
			165					170						175	
Ala	Ala	Ser	Lys	Val	Thr	His	Ala	Leu	Val	Asn	Ile	Arg	Ala	Ile	Ile
			180					185						190	
Asn	His	Phe	Asn	Pro	Lys	Ile	Glu	Ser	Tyr	Ala	Ala	Val	Asn	His	Ile
		195					200						205		
Ser	Gln	Leu	Ser	Glu	Glu	Gln	Val	Leu	Glu	Val	Val	Arg	Ala	Asn	Tyr
	210					215						220			
Asp	Thr	Leu	Thr	Leu	Lys	Leu	Gln	Asp	Gly	Leu	Asp	Gln	Tyr	Glu	Arg
225					230					235					240
Tyr	Ser	Glu	Gln	His	Lys	Glu	Ala	Ala	Phe	Phe	Lys	Glu	Leu	Val	Arg
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<210> 971
 <211> 337
 <212> DNA
 <213> Homo sapiens

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 aatcccaacc ccaaatacct gggtgttaac ggagacgaat ccgaaccggg cacgtgcaag
 180
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 240
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 337

<210> 972
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 972
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 20 25 30
 Lys Trp Ser Phe Val Pro Gln Asn Asn Pro Asn Pro Lys Tyr Leu Val
 35 40 45
 Val Asn Gly Asp Glu Ser Glu Pro Gly Thr Cys Lys Asp Met Pro Leu
 50 55 60
 Ile Met Ala Ser Pro His Thr Leu Val Glu Gly Ala Leu Ile Ser Arg
 65 70 75 80
 Tyr Ala Phe Gly Ser Glu Gln Ala Phe Ile Tyr Leu Arg Gly Glu Val
 85 90 95
 Val Gln Val Ala Arg Arg Leu Glu Glu Lys Lys Lys Met Arg Xaa Xaa
 100 105 110

<210> 973
 <211> 360
 <212> DNA
 <213> Homo sapiens

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 ccgggacctt ctgtataggc atcacttagg aaccagtcag accatcagat tctcaggacc
 180

cactggatca actgagtcag gaactcaggg ttttcaacac atcctccggg gggattccag
 240
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 360

<210> 974

<211> 91

<212> PRT

<213> Homo sapiens

<400> 974

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Tyr	Arg	His	His	Leu	Gly	Thr	Ser	Gln	Thr	Ile	Arg	Phe	Ser	Gly	Pro
			20					25					30		
Thr	Gly	Ser	Thr	Glu	Ser	Gly	Thr	Gln	Gly	Phe	Gln	His	Ile	Leu	Arg
			35				40					45			
Gly	Asp	Ser	Ser	Gly	Cys	Val	Thr	Leu	Arg	Thr	Thr	Gly	Lys	Val	Ala
	50					55					60				
Leu	Gly	Ser	Glu	Ile	Arg	Val	His	Ile	Leu	Gly	Leu	Pro	Leu	Thr	Asp
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Cys	Asn	Gly	Gly	Gln	Val	Thr	Cys	Arg	Ala	Gln					
				85					90						

<210> 975

<211> 2604

<212> DNA

<213> Homo sapiens

<400> 975

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 360
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 420
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 540
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 2580
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 2604

<210> 976
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 976
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 Arg Arg Asn Glu Pro Thr Leu Pro Arg Glu Phe Thr Arg Arg Gly Arg
 35 40 45
 Arg Gly Ala Val Ser Val Asp Ser Leu Ala Glu Leu Glu Asp Gly Ala
 50 55 60
 Leu Leu Leu Gln Thr Leu Gln Leu Ser Lys Ile Ser Phe Pro Ile Gly
 65 70 75 80
 Gln Arg Leu Leu Gly Ser Lys Arg Lys Met Ser Leu Asn Pro Ile Ala
 85 90 95
 Lys Gln Ile Pro Gln Val Val Glu Ala Cys Cys Gln Phe Ile Glu Lys
 100 105 110
 His Gly Leu Ser Ala Val Gly Ile Phe Thr Leu Glu Tyr Ser Val Gln
 115 120 125
 Arg Val Arg Gln Leu Arg Glu Glu Phe Asp Gln Gly Leu Asp Val Val
 130 135 140
 Leu Asp Asp Asn Gln Asn Val His Asp Val Ala Ala Leu Leu Lys Glu
 145 150 155 160
 Phe Phe Arg Asp Met Lys Asp Ser Leu Leu Pro Asp Asp Leu Tyr Met
 165 170 175
 Ser Phe Leu Leu Thr Ala Thr Leu Lys Pro Gln Asp Gln Leu Ser Ala
 180 185 190
 Leu Gln Leu Leu Val Tyr Leu Thr Pro Pro Cys His Ser Asp Thr Leu
 195 200 205
 Glu Arg Leu Leu Lys Ala Leu His Lys Ile Thr Glu Asn Cys Glu Asp
 210 215 220
 Ser Ile Gly Ile Asp Gly Gln Leu Val Pro Gly Asn Arg Met Thr Ser
 225 230 235 240
 Thr Asn Leu Ala Leu Val Phe Gly Ser Ala Leu Leu Lys Lys Gly Lys
 245 250 255
 Phe Gly Lys Arg Glu Ser Arg Lys Thr Lys Leu Gly Ile Asp His Tyr
 260 265 270
 Val Ala Ser Val Asn Val Val Arg Ala Met Ile Asp Asn Trp Asp Val

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      275      280      285
Leu Phe Gln Val Pro Pro His Ile Gln Arg Gln Val Ala Lys Arg Val
      290      295      300
Trp Lys Ser Ser Pro Glu Ala Leu Asp Phe Ile Arg Arg Arg Asn Leu
305      310      315      320
Arg Lys Ile Gln Ser Ala Arg Ile Lys Met Glu Glu Asp Ala Leu Leu
      325      330      335
Ser Asp Pro Val Glu Thr Ser Ala Glu Ala Arg Ala Ala Val Leu Ala
      340      345      350
Gln Ser Lys Pro Ser Asp Glu Gly Ser Ser Glu Glu Pro Ala Val Pro
      355      360      365
Ser Gly Thr Ala Arg Ser His Asp Asp Glu Glu Gly Ala Gly Asn Pro
      370      375      380
Pro Ile Pro Glu Gln Asp Arg Pro Leu Leu Arg Val Pro Arg Glu Lys
385      390      395      400
Glu Ala Lys Thr Gly Val Ser Tyr Phe Phe Pro
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<210> 977

<211> 378

<212> DNA

<213> Homo sapiens

<400> 977

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180
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378

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<210> 978

<211> 126

<212> PRT

<213> Homo sapiens

<400> 978

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Arg Val Lys Gly Ala Ile Gln Arg Ser Thr Glu Thr Gly Leu Ala Val
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      20      25      30
Asp Ser Met Asn Ser Tyr Gly Ser Glu Gly Asn Leu Asn Tyr Gly Gly
      35      40      45
Val Cys Leu Ala Ser Asp Ala Gln Phe Ser Asp Phe Leu Gly Ser Met
      50      55      60
Gly Pro Ala Gln Phe Val Gly Arg Gln Thr Leu Ala Thr Thr Pro Met

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65		70		75		80									
Gly	Asp	Val	Glu	Ile	Gly	Leu	Gln	Glu	Arg	Asn	Gly	Gln	Leu	Glu	Val
				85					90					95	
Asp	Ile	Ile	Gln	Ala	Arg	Gly	Leu	Thr	Ala	Lys	Pro	Gly	Ser	Lys	Thr
			100					105					110		
Leu	Pro	Ala	Ala	Tyr	Ile	Lys	Ala	Tyr	Leu	Leu	Glu	Met	Ala		
		115					120					125			

<210> 979

<211> 3500

<212> DNA

<213> Homo sapiens

<400> 979

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1140
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1200

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<210> 980

<211> 73

<212> PRT

<213> Homo sapiens

<400> 980

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Leu	Ala	Gln	Gly	Arg	Gly	Cys	Arg	Gln	Gly	Lys	Gly	His	Trp	Pro	Pro
		20						25					30		
Cys	Phe	Gln	Val	Leu	Thr	Ala	Ser	Gly	Trp	Ser	Leu	Glu	Ala	Thr	Glu
		35					40					45			
Glu	Arg	Asn	Ala	Trp	Leu	Arg	Ala	Ala	Glu	His	Ser	Glu	Ala	Ser	Arg
	50					55					60				
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<210> 981

<211> 404

<212> DNA

<213> Homo sapiens

<400> 981

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accgcactcg cggaggcggg tgcgcgaggg ggggcgggta accaccgggtt tgggtggagac
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ccatccggtg caccggacca agcgtgtgga ggaacagcta gcggcgaca aggcggcgcg
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404

<210> 982
<211> 134
<212> PRT
<213> Homo sapiens

<400> 982
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Thr Ala Pro Val Gly Trp Glu Leu Val Arg Val Glu His Val Glu Leu
35 40 45
Asp Asp Glu Asp Val Asp Asp Glu Asn Thr Asp Ile Thr Ala Leu Ala
50 55 60
Glu Ala Gly Ala Arg Gly Gly Ala Gly Asn His Arg Phe Gly Gly Asp
65 70 75 80
Arg Pro Gly Ser Asp Arg Val Leu Gly Arg Gln Arg Leu Gln Gln Pro
85 90 95
Arg His Leu Gln Pro Ser Gly Ala Pro Asp Gln Ala Cys Gly Gly Thr
100 105 110
Ala Ser Gly Ala Gln Gly Gly Ala Pro Leu Pro Pro Ala His Cys Pro
115 120 125
Gly Ser Glu Pro Gly Arg
130

<210> 983
<211> 579
<212> DNA
<213> Homo sapiens

<400> 983
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120
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180
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360
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420

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 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 984
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 Ile Thr Leu Asn Ile Thr His Ser Ser Pro Ala Thr Leu Ala Ser Leu
 35 40 45
 Leu Phe Pro Lys Arg Ala Arg Tyr Pro Ser Phe Ser Gly Pro Leu Tyr
 50 55 60
 Leu Phe Phe Ser Leu Pro Glu Thr Pro Phe Leu Leu Asn Asn Leu Met
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 Val Phe Pro Asp Gln His Ile
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<210> 985
 <211> 313
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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<210> 986
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 <212> PRT
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<400> 986
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Asp Ala Leu Pro Val Asp Gln Gln Val Ala Phe Phe Leu Asn Asn Met			
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<210> 987

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<210> 988
 <211> 873
 <212> PRT
 <213> Homo sapiens

<400> 988

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Gly	Arg	Lys	Cys	Cys	Ala	Leu	Ala	Asn	Leu	Ala	Asp	Met	Leu	Thr	Val
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Phe	Ala	Leu	Thr	Glu	Asp	Asp	Pro	Gln	Glu	Val	Ser	Ala	Thr	Val	Tyr
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Leu	Asp	Lys	Leu	Ala	Thr	Val	Ile	Ser	Val	Trp	Asn	Ser	Asp	Thr	Gln
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Asn	Pro	Tyr	His	Gln	Gln	Ala	Leu	Ala	Glu	Lys	Val	Lys	Glu	Ala	Glu
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Phe	Val	Gly	Cys	Glu	Phe	Leu	His	His	Leu	Leu	Arg	Glu	Trp	Gly	Glu
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Glu	Leu	Gln	Ala	Val	Leu	Arg	Ser	Ser	Gln	Gly	Thr	Ser	Tyr	Asp	Ser
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Tyr	Arg	Leu	Cys	Asp	Ser	Leu	Thr	Ser	Phe	Ser	Gln	Asn	Ala	Thr	Leu
			165						170					175	
Tyr	Leu	Asn	Arg	Thr	Ser	Leu	Ser	Lys	Glu	Asp	Arg	Gln	Val	Val	Ser
			180					185					190		
Glu	Leu	Ala	Glu	Cys	Val	Arg	Asp	Phe	Leu	Arg	Lys	Thr	Ser	Thr	Val
	195						200					205			
Leu	Lys	Asn	Arg	Ala	Leu	Glu	Asp	Ile	Thr	Ala	Ser	Ile	Ala	Met	Ala
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Gly	Ser	Asn	Arg	Ala	Leu	Phe	Arg	Glu	Pro	Asp	Leu	Val	Leu	Arg	Leu
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Trp	Gly	Arg	Lys	Gly	Leu	Ser	Glu	Lys	Leu	Leu	Ala	Tyr	Val	Glu	Gly
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Phe	Gln	Glu	Asp	Leu	Asn	Thr	Thr	Phe	Asn	Gln	Leu	Thr	Gln	Ser	Ala
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Ile	Val	His	Pro	Glu	Val	Thr	Val	Lys	Lys	Met	Cys	Ser	Leu	Ala	Val

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	405	410
Phe Met Val Ser Cys Leu Lys Glu Thr Val Trp Met Lys Phe Ser Thr		415
	420	425
Pro Lys Glu Glu Lys Gln Phe Leu Glu Leu Leu Asn Cys Leu Met Ser		430
	435	440
Pro Val Lys Pro Gln Gly Ile Pro Val Ala Ala Leu Leu Glu Pro Asp		445
	450	455
Glu Val Leu Lys Glu Phe Val Leu Pro Phe Leu Arg Leu Asp Val Glu		460
465	470	475
Glu Val Asp Leu Ser Leu Arg Ile Phe Ile Gln Thr Leu Glu Ala Asn		480
	485	490
Ala Cys Arg Glu Glu Tyr Trp Leu Gln Thr Cys Ser Pro Phe Pro Leu		495
	500	505
Leu Phe Ser Leu Cys Gln Leu Leu Asp Arg Phe Ser Lys Tyr Trp Gln		510
	515	520
Leu Pro Lys Glu Lys Arg Cys Leu Ser Leu Asp Arg Lys Asp Leu Ala		525
	530	535
Ile His Ile Leu Glu Leu Leu Cys Glu Ile Val Ser Ala Asn Ala Glu		540
545	550	555
Thr Phe Ser Pro Asp Val Trp Ile Lys Ser Leu Ser Trp Leu His Arg		560
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Lys Leu Glu Gln Leu Asp Trp Thr Val Gly Leu Arg Leu Lys Ser Phe		575
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Phe Glu Gly His Phe Lys Cys Glu Val Pro Ala Thr Leu Phe Glu Ile		590
	595	600
Cys Lys Leu Ser Glu Asp Glu Trp Thr Ser Gln Ala His Pro Gly Tyr		605
	610	615
Gly Ala Gly Thr Gly Leu Leu Ala Trp Met Glu Cys Cys Cys Val Ser		620
625	630	635
Ser Gly Ile Ser Glu Arg Met Leu Ser Leu Leu Val Val Asp Val Gly		640
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Val Gln Val Met Pro Trp Cys Ser Pro Gln Glu Trp Gln Arg Leu His		670
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Gln Leu Thr Arg Arg Leu Leu Glu Lys Gln Leu Leu His Val Pro Tyr		685
	690	695
Ser Leu Glu Tyr Ile Gln Phe Val Pro Leu Leu Asn Leu Lys Pro Phe		700
705	710	715
Ala Gln Glu Leu Gln Leu Ser Val Leu Phe Leu Arg Thr Phe Gln Phe		720
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Leu Cys Ser His Ser Cys Arg Asn Trp Leu Pro Leu Glu Gly Trp Asn		735
	740	745
His Val Val Lys Leu Leu Cys Gly Ser Leu Thr Arg Leu Leu Asp Ser		750
	755	760
Val Arg Ala Ile Gln Ala Ala Gly Pro Trp Val Gln Gly Pro Glu Gln		765
	770	775
Asp Leu Thr Gln Glu Ala Leu Phe Val Tyr Thr Gln Val Phe Cys His		780
785	790	795
Ala Leu His Ile Met Ala Met Leu His Pro Glu Val Cys Glu Pro Leu		800

805 810 815
 Tyr Val Leu Ala Leu Glu Thr Leu Thr Cys Tyr Glu Thr Leu Ser Lys
 820 825 830
 Thr Asn Pro Ser Val Ser Ser Leu Leu Gln Arg Ala His Glu Gln Cys
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 Phe Leu Lys Ser Ile Ala Glu Gly Ile Gly Pro Glu Glu Arg Arg Gln
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<210> 989

<211> 402

<212> DNA

<213> Homo sapiens

<400> 989

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<211> 134

<212> PRT

<213> Homo sapiens

<400> 990

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 35 40 45
 Leu Leu Asp Glu Pro Thr Asn His Leu Asp Ala Glu Ser Val Asn Trp
 50 55 60
 Leu Glu Gly His Leu Lys Ser Tyr Pro Gly Ala Val Leu Ala Val Thr
 65 70 75 80
 His Asp Arg Tyr Phe Leu Asp His Val Ala Glu Trp Ile Cys Glu Val
 85 90 95
 Asp Arg Gly Gln Leu His Pro Tyr Glu Gly Asn Tyr Ser Thr Tyr Leu
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 Arg Ala Lys Ile Leu Glu

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 Tyr Trp Leu Thr Thr Gly Asn Thr Glu Asp Ser Phe Arg Glu Ser Asp
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 Val Phe Ser Pro Thr Val Val Ser Ala Glu Ser Thr Asp Gln Tyr Val
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 Trp Ile Glu Val Val Glu Ala Asn Phe Ser Cys Gly Thr Gly Glu Ser
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 <211> 110
 <212> PRT
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<400> 994
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<210> 996

<211> 308

<212> PRT

<213> Homo sapiens

<400> 996

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			85					90					95		
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			165					170					175		
Pro	Met	Val	Gly	Ala	Thr	Asp	Leu	Phe	Pro	Cys	Asn	Phe	Ser	Lys	Asn
		180						185					190		
Asp	Val	Met	Leu	Ser	Ala	Val	Val	Met	Thr	Tyr	Trp	Thr	Asn	Phe	Ala
		195					200					205			
Lys	Thr	Gly	Asp	Pro	Asn	Gln	Pro	Val	Pro	Gln	Asp	Thr	Lys	Phe	Ile
	210					215					220				
His	Thr	Lys	Pro	Asn	Arg	Phe	Glu	Glu	Val	Val	Trp	Ser	Lys	Phe	Asn

225 230 235 240
 Ser Lys Glu Lys Gln Tyr Leu His Ile Gly Leu Lys Pro Arg Val Arg
 245 250 255
 Asp Asn Tyr Arg Ala Asn Lys Val Ala Phe Trp Leu Glu Leu Val Pro
 260 265 270
 His Leu His Asn Leu His Thr Glu Leu Phe Thr Thr Thr Thr Arg Leu
 275 280 285
 Pro Pro Tyr Ala Thr Arg Trp Pro Pro Arg Pro Pro Ala Gly Ala Pro
 290 295 300
 Gly Thr Arg Arg
 305

<210> 997

<211> 320

<212> DNA

<213> Homo sapiens

<400> 997

aaatttaata ccatagcctt ctcttggttg atccttctag gcatgagtta tggcattaaa
 60
 acgggcatcc atcttggtgt cgatatcgta cttaatgccg tgcctaaacg agtatcaaga
 120
 gccttgctctt tgttcggtgc ctttgccgct attatgtaac gtctcattct acttgattct
 180
 acctgggttag ccttactcgg tatcgatgta cgaggtggtg ccatcgaata ttgggcgaag
 240
 atgttcaaaa taggtattgg tactgaagag cttcgttacc ctatctttat gcaagatatg
 300
 tttgatttgc gcccacgcgt
 320

<210> 998

<211> 106

<212> PRT

<213> Homo sapiens

<400> 998

Lys Phe Asn Thr Ile Ala Phe Ser Trp Leu Ile Leu Leu Gly Met Ser
 1 5 10 15
 Tyr Gly Ile Lys Thr Gly Ile His Leu Gly Val Asp Ile Val Leu Asn
 20 25 30
 Ala Val Pro Lys Arg Val Ser Arg Ala Leu Ser Leu Phe Gly Ala Phe
 35 40 45
 Ala Ala Ile Met Tyr Gly Leu Ile Leu Leu Asp Ser Thr Trp Leu Ala
 50 55 60
 Leu Leu Gly Ile Asp Val Arg Gly Gly Ala Ile Glu Tyr Trp Ala Lys
 65 70 75 80
 Met Phe Lys Ile Gly Ile Gly Thr Glu Glu Leu Arg Tyr Pro Ile Phe
 85 90 95
 Met Gln Asp Met Phe Asp Leu Arg Pro Arg
 100 105

<210> 999

<211> 401

<212> DNA

<213> Homo sapiens

<400> 999

acgcgttcag gcggttaaca atcgcgctaa gaagctgacc aaggaaaatg tcggcatggt
 60
 acatctgagc aagagcttca tcgggtgttta tctctactca gaaggcaagt ttgtgaccag
 120
 caactatctc aatcgtggct acaaggacat tctgagctat gcagacgatg ctagtctttt
 180
 gcaaaagcct ccagcagtgg cttcagatga tctggataca ggtctcttga agagggcctt
 240
 ggatgagtgg gtggctgatg ctaagaacca cattctcaat actgaaaact tctttagcgg
 300
 gtcaaccggt ctcaacattg acagtttcta cgtctttggt gaccaagaca tctgctggca
 360
 gttggcagct attctgaagc agagcatgaa tcgggaattg t
 401

<210> 1000

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1000

Met	Val	His	Leu	Ser	Lys	Ser	Phe	Ile	Gly	Val	Tyr	Leu	Tyr	Ser	Glu
1				5					10					15	
Gly	Lys	Phe	Val	Thr	Ser	Asn	Tyr	Leu	Asn	Arg	Gly	Tyr	Lys	Asp	Ile
			20					25					30		
Leu	Ser	Tyr	Ala	Asp	Asp	Ala	Ser	Leu	Leu	Gln	Lys	Pro	Pro	Ala	Val
		35					40					45			
Ala	Ser	Asp	Asp	Leu	Asp	Thr	Gly	Leu	Leu	Lys	Arg	Ala	Leu	Asp	Glu
	50					55					60				
Trp	Val	Ala	Asp	Ala	Lys	Asn	His	Ile	Leu	Asn	Thr	Glu	Asn	Phe	Phe
65					70				75					80	
Ser	Gly	Ser	Thr	Gly	Leu	Asn	Ile	Asp	Ser	Phe	Tyr	Val	Phe	Gly	Asp
			85					90						95	
Gln	Asp	Ile	Cys	Trp	Gln	Leu	Ala	Ala	Ile	Leu	Lys	Gln	Ser	Met	Asn
			100				105						110		
Arg	Glu	Leu													
			115												

<210> 1001

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1001

cgcggtattg caatgcgcct ggtgccgaat gctaaacctg ctcttgattg cccggtactg
 60
 ttcccttatg cccctaattg ggtgattggt ggcttcctgg ccactaccgt tggttcaatt
 120
 atcggatatga ttgtcttccc gctgtttggt ctggcgatga tccttccggg tctgctaact
 180

aactttcttcg ctggtggtgc cgctggagtc tttggcaacg cgatgggagg acgtaaaggg
240
gcaattattg gcggcgtagt gcacgggctg tttatcaccg tgttaccagc gatgctaac
300
cccttactgg aaaccttcgg cttcaaaggc gtcaccttca gtgattccga t
351

<210> 1002
<211> 117
<212> PRT
<213> Homo sapiens

<400> 1002
Arg Gly Ile Ala Met Arg Leu Val Pro Asn Ala Lys Pro Ala Leu Asp
1 5 10 15
Cys Pro Val Leu Phe Pro Tyr Ala Pro Asn Ala Val Ile Val Gly Phe
20 25 30
Leu Ala Thr Thr Val Gly Ser Ile Ile Gly Met Ile Val Phe Pro Leu
35 40 45
Phe Gly Leu Ala Met Ile Leu Pro Gly Leu Leu Thr Asn Phe Phe Ala
50 55 60
Gly Gly Ala Ala Gly Val Phe Gly Asn Ala Met Gly Gly Arg Lys Gly
65 70 75 80
Ala Ile Ile Gly Gly Val Val His Gly Leu Phe Ile Thr Leu Leu Pro
85 90 95
Ala Met Leu Ile Pro Leu Leu Glu Thr Phe Gly Phe Lys Gly Val Thr
100 105 110
Phe Ser Asp Ser Asp
115

<210> 1003
<211> 444
<212> DNA
<213> Homo sapiens

<400> 1003
acgcgtcctc ctttagtcga tcgcgaatat gataggcgaa gcgacgtgat ggtgtgacgc
60
acgagcactg ccccatctcc taggcttagg gttatgcaga ctcccatcga cgctacctcc
120
acccccgcat ggggcacact ctccggccta aagtcccgtc tcgctgacgg gccacataaa
180
ctgcgccgtt tggtcgacgc cgaccctcac cgcgctgagc gctacacctt tgacgtcgcg
240
gatttgcacg tcgatttate gaagaacctc cttaccgacg agattcgtga cgctctcctc
300
gaactggctg cgcagatgcg cgtcaccgag cgtcgtgacg cgatgtatgc cggtgagcac
360
atcaacgtca ccgaggaccg cgccgtcctc cataccgcgc tgtgtcgtcc ccgcactgac
420
gagctgcatg ttgacggtca ggat
444

<210> 1004

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1004

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Met Gln Thr Pro Ile Asp Ala Thr Ser Thr Pro Ala Trp Gly Thr Leu
 1             5             10             15
Ser Gly Leu Lys Ser Arg Phe Ala Asp Gly Pro His Lys Leu Arg Arg
      20             25             30
Leu Phe Asp Ala Asp Pro His Arg Ala Glu Arg Tyr Thr Phe Asp Val
      35             40             45
Ala Asp Leu His Val Asp Leu Ser Lys Asn Leu Leu Thr Asp Glu Ile
      50             55             60
Arg Asp Ala Leu Leu Glu Leu Ala Ala Gln Met Arg Val Thr Glu Arg
65             70             75             80
Arg Asp Ala Met Tyr Ala Gly Glu His Ile Asn Val Thr Glu Asp Arg
      85             90             95
Ala Val Leu His Thr Ala Leu Cys Arg Pro Arg Thr Asp Glu Leu His
      100            105            110
Val Asp Gly Gln Asp
      115

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<210> 1005
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 1005

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ccatggccat tcctctggtg actgcatcca gtccgatgga tttaaaccac cccaatgtgc
60
tggtgactcc caagtttaca cctccagcca gggcttctct cctggggttg catacccacc
120
tatctatctg ccttagccac tcgtgtctga cgagcacctc acacctccag aggctcctca
180
tttcttccca tgctgcttc tcccacactc ctccctctca catgagggca acttcacct
240
cccagttgct caggccccaa acctccatca gttttgactc ttctctcgca cactactcg
299

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<210> 1006
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1006

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Met Ala Ile Pro Leu Val Thr Ala Ser Ser Pro Met Asp Leu Asn Thr
 1             5             10             15
Pro Asn Val Leu Val Thr Pro Lys Phe Thr Pro Pro Ala Arg Ala Ser
      20             25             30
Leu Leu Gly Leu His Thr His Leu Ser Ile Cys Leu Ser His Ser Cys
      35             40             45
Leu Thr Ser Thr Ser His Leu Gln Arg Leu Leu Ile Ser Ser His Ala
      50             55             60
Cys Phe Ser His Thr Pro Pro Ser His Met Arg Ala Thr Ser Ser Ser

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65 70 75 80
Gln Leu Leu Arg Pro Gln Thr Ser Ile Ser Phe Asp Ser Ser Leu Ala
 85 90 95
His Tyr Ser

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<210> 1007
<211> 389
<212> DNA
<213> Homo sapiens
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<400> 1007
gccggcgcgca agatctaaag agctggaaag gcaaccgcaa gagagcgggg ttcttgacct
60
atgagcgcgcg tttcatggac tccatcttcg gcccggggcc tgggtgtgac gtctctgaaa
120
tcaacgacgc caccgaggca cccagaggtg tgacgttgag tgatggccga cgacagggca
180
acgccgggagc aatcgggtgac ttcttcgcat cgaaggacta caagccgtcc gcggcgagcc
240
tccgaggtcc ggcgagggat ccgaaatgga tcgacgttca acgctcattc cacgagaacg
300
aagaaggccc gtacagctgg tacacctggc gcgggcaggc ttttgacacg ggcgctggat
360
ggcgtaataa cgtccatgcc gcgacaacg
389

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<210> 1008
<211> 105
<212> PRT
<213> Homo sapiens
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```

<400> 1008
Met Asp Ser Ile Phe Gly Pro Gly Pro Gly Val Thr Val Ser Glu Ile.
  1           5           10           15
Asn Asp Ala Thr Glu Ala Pro Arg Gly Val Thr Leu Ser Asp Gly Arg
          20           25           30
Arg Gln Gly Asn Ala Gly Ala Ile Gly Asp Phe Phe Ala Ser Lys Asp
          35           40           45
Tyr Lys Pro Ser Ala Ala Ser Leu Arg Gly Pro Ala Arg Asp Pro Lys
          50           55           60
Trp Ile Asp Val Gln Arg Ser Phe His Glu Asn Glu Glu Gly Pro Tyr
65           70           75           80
Ser Trp Tyr Thr Trp Arg Gly Gln Ala Phe Asp Thr Gly Ala Gly Trp
          85           90           95
Arg Lys Tyr Val His Ala Ala Thr Thr
          100           105

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<210> 1009
<211> 324
<212> DNA
<213> Homo sapiens
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<400> 1009

ngccttcatg gctgntatgc ctggcctcat ccccatccct ggcacccgtg acgatagcca
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 cattccactg gtgtttcccc aggaaagcca accctacctg catctcagca gagcttccac
 120
 ggagttggaa ccccgctccg agaggggtgtg ggctcagggg ccaggggtca cacaaactcc
 180
 agaaggagga cgtagtgtgt ttgcaaggct gtcctttgcc ctgggtgaat aacottcggt
 240
 ctgccccgag aggaacgtgg gcattaggct gcacccgcag gaagccatgt attttctgag
 300
 aaacttggcc catggtgcag atct
 324

<210> 1010

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1010

Met	Gly	Gln	Val	Ser	Gln	Lys	Ile	His	Gly	Phe	Leu	Arg	Val	Gln	Pro
1				5					10					15	
Asn	Ala	His	Val	Pro	Leu	Gly	Ala	Asp	Arg	Arg	Leu	Phe	Asn	Gln	Gly
			20					25					30		
Lys	Gly	Gln	Pro	Cys	Lys	Pro	Thr	Thr	Ser	Ser	Phe	Trp	Ser	Leu	Cys
		35					40					45			
Asp	Pro	Trp	Pro	Leu	Ser	Pro	His	Pro	Leu	Gly	Ala	Gly	Phe	Gln	Leu
	50					55					60				
Arg	Gly	Ser	Ser	Ala	Glu	Met	Gln	Val	Gly	Leu	Ala	Phe	Leu	Gly	Lys
65				70					75					80	
His	Gln	Trp	Asn	Val	Ala	Ile	Val	Thr	Gly	Ala	Arg	Asp	Gly	Asp	Glu
			85						90					95	
Ala	Arg	His	Xaa	Ser	His	Glu	Gly								
															100

<210> 1011

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1011

ctgcagaaaa ggaggggggtt cccatgccaa ggcagaactg tctgggacag acgctgcccg
 60
 gatccctgcg gctgcctgca ctctggacca cgagctctga gagcagcagg ttgagggccg
 120
 gtgggcagca gctcggaggg tccgcgaggt gcaggagacg caggcatggc cggtgagctg
 180
 actcctgagg aggaggccca gtacaaaaag gctttctccg cggttgacac ggatggaaac
 240
 ggcaccatca atgccagga gctgggcgcg gcgctgaagg ccacgggcaa gaacctctcg
 300
 gaggccagc taaagaaact catctccgag
 330

<210> 1012

<211> 55
<212> PRT
<213> Homo sapiens

<400> 1012
Met Ala Gly Glu Leu Thr Pro Glu Glu Glu Ala Gln Tyr Lys Lys Ala
1 5 10 15
Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln Glu
20 25 30
Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala Gln
35 40 45
Leu Lys Lys Leu Ile Ser Glu
50 55

<210> 1013
<211> 432
<212> DNA
<213> Homo sapiens

<400> 1013
nacttgacac tcgtggtggc gtcgctgcgt gcggcactga caatgtgact ggcgcatcgc
60
tggcggcgctc tcctcgtcgc cgggagcggc gaggaaggat taacgatgac cagcgacgctc
120
cccgggattg gctcgaacgc cgccactttg gcgcgttccc aggctcgcag tgacaaggctc
180
gaggctgatt tggcgggtcca tcccagacaag tggcgcatc tgggggggga ccgtcctact
240
ggcagcctgc acatcggtca ctacttcggg tcgctggcga atcgggtacg cgtgcagaaac
300
aagggcattg agtctttcct tgcgctgcgt gactaccagg ttatctatga ccgcgggggg
360
ggtggtgacc tgcaggccaa tggtatgtcg aatgtcgccg attacctggc aatcggcatt
420
gacccaacgc gt
432

<210> 1014
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1014
Met Thr Ser Asp Val Pro Gly Ile Gly Ser Asn Ala Ala Thr Leu Ala
1 5 10 15
Arg Ser Gln Ala Arg Ser Asp Lys Val Glu Ala Asp Leu Ala Val His
20 25 30
Pro Asp Lys Trp Arg Ile Leu Gly Gly Asp Arg Pro Thr Gly Ser Leu
35 40 45
His Ile Gly His Tyr Phe Gly Ser Leu Ala Asn Arg Val Arg Val Gln
50 55 60
Asn Lys Gly Ile Glu Ser Phe Leu Val Val Ala Asp Tyr Gln Val Ile
65 70 75 80
Tyr Asp Arg Gly Gly Gly Gly Asp Leu Gln Ala Asn Val Met Ser Asn

85 90 95
 Val Ala Asp Tyr Leu Ala Ile Gly Ile Asp Pro Thr Arg
 100 105
 <210> 1015
 <211> 467
 <212> DNA
 <213> Homo sapiens
 <400> 1015
 nngaattcga tggctgtgaa aggtcgagct cttaagtgtt ttcatatccc ctgtgtgggtt
 60
 gaaaacttcc cgatgaaagc gcgcacgggt gaagagctga aagaattgga aagagtttta
 120
 cagcaaaaga agattgaagc agagtgtctt aaactacgga aggaaattgt agaggctcag
 180
 tctggagtta agttgattaa acagcgtcat gaagaggatg atgaagaaga ggaagaggaa
 240
 gacaagacag taaaatatag caatttgccc aattacctgc ttggtagtct gagtactgat
 300
 tttggggtag atacctcttt attgtcaagc caattggagc ttcattccag agaagagaaa
 360
 atcaaccaa ttatattatt gaaagatatc atttacaagg taaaaactgt tttcaataat
 420
 gagtttgacg ctgcatataa acaaaaagag tttgaaattg cacgcgt
 467

<210> 1016
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 1016
 Xaa Asn Ser Met Ala Val Lys Gly Arg Ala Leu Lys Cys Phe His Ile
 1 5 10 15
 Pro Cys Val Val Glu Asn Phe Pro Met Lys Ala Arg Thr Val Glu Glu
 20 25 30
 Leu Lys Glu Leu Glu Arg Val Leu Gln Gln Lys Lys Ile Glu Ala Glu
 35 40 45
 Cys Leu Lys Leu Arg Lys Glu Ile Val Glu Ala Gln Ser Gly Val Lys
 50 55 60
 Leu Ile Lys Gln Arg His Glu Glu Asp Asp Glu Glu Glu Glu Glu
 65 70 75 80
 Asp Lys Thr Val Lys Tyr Ser Asn Leu Pro Asn Tyr Leu Leu Gly Ser
 85 90 95
 Leu Ser Thr Asp Phe Gly Val Asp Thr Ser Leu Leu Ser Ser Gln Leu
 100 105 110
 Glu Leu His Ser Arg Glu Glu Lys Ile Asn Gln Ile Ile Leu Leu Lys
 115 120 125
 Asp Ile Ile Tyr Lys Val Lys Thr Val Phe Asn Asn Glu Phe Asp Ala
 130 135 140
 Ala Tyr Lys Gln Lys Glu Phe Glu Ile Ala Arg
 145 150 155

<210> 1017
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 1017
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 60
 aacattaaag tgggtcgccc cggctacttt gcggagggtca tggatttcta tgcgcattat
 120
 ctgaaggggtg cggttaccgc tttccgtccg aattttattg tgcaggataa tacggggccgt
 180
 tggcgtgttc agtcgtcgtg gccgcagccg aatcgactg ttacttttgc gggacccgcg
 240
 ggcattgtcc gctacgggtac gacgttggcg gcccgcacgc atgggaatgg tcaggctatt
 300
 ccgcaggcgg atgcacagtc tcttaaccgc gagaa
 335

<210> 1018
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1018
 Met Trp Asn His Val Arg Ala Asn Glu Lys Asp Ala Lys Gly Asn Ile
 1 5 10 15
 Lys Val Gly Arg Pro Gly Tyr Phe Ala Glu Val Met Asp Phe Tyr Ala
 20 25 30
 His Tyr Leu Lys Gly Ala Val Thr Arg Phe Arg Pro Asn Phe Ile Val
 35 40 45
 Gln Asp Asn Thr Gly Arg Trp Arg Val Gln Ser Ser Trp Pro Gln Pro
 50 55 60
 Asn Arg Thr Val Thr Phe Ala Gly Pro Arg Gly Ile Val Arg Tyr Gly
 65 70 75 80
 Thr Thr Leu Ala Ala Arg Thr His Gly Asn Gly Gln Ala Ile Pro Gln
 85 90 95
 Ala Asp Ala Gln Ser Leu Asn Arg Glu
 100 105

<210> 1019
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 1019
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 60
 ctctggagcc tcctcctcaa tggcgttgcc catggtgcct ggcttgggtg atgaggcggg
 120
 tgaagggcgt ggggccagggt ggtgcgggat gaagtcagcc tcgttgaaga gctcgtggct
 180
 ggaggagccg ctgcctgagc cttcagggcc cagtgtgccc agggggccacc gacagagtgg
 240

cagagagcag gtgacttcct ggcactgcgg agcgaggacc cggagaagta cttcctcaat
 300
 ggtggctgga ccatccagtg gaacggggac taccaggtgg cagggaccac cttcacatac
 360
 gcacgcaggg gcaactggga gaacctcacg tccccgggtc ccaccaagga gcctgtctgg
 420
 atccagctgc tgttcagga gagcaaccct gggg
 454

<210> 1020

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1020

Met	Ala	Leu	Pro	Met	Val	Pro	Gly	Leu	Gly	Asp	Glu	Ala	Gly	Glu	Gly
1				5				10					15		
Arg	Gly	Ala	Arg	Trp	Cys	Gly	Met	Lys	Ser	Ala	Ser	Leu	Lys	Ser	Ser
		20						25				30			
Trp	Leu	Glu	Glu	Pro	Leu	Pro	Glu	Pro	Ser	Gly	Pro	Ser	Val	Pro	Arg
		35					40				45				
Gly	His	Arg	Gln	Ser	Gly	Arg	Glu	Gln	Val	Thr	Ser	Trp	His	Cys	Gly
	50					55				60					
Ala	Arg	Thr	Arg	Arg	Ser	Thr	Ser	Ser	Met	Val	Ala	Gly	Pro	Ser	Ser
65				70					75					80	
Gly	Thr	Gly	Thr	Thr	Arg	Trp	Gln	Gly	Pro	Pro	Ser	His	Thr	His	Ala
			85					90					95		
Gly	Ala	Thr	Gly	Arg	Thr	Ser	Arg	Pro	Arg	Val	Pro	Pro	Arg	Ser	Leu
		100						105					110		
Ser	Gly	Ser	Ser	Cys	Cys	Ser	Arg	Arg	Ala	Thr	Leu	Gly			
		115					120					125			

<210> 1021

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1021

cagctgtgtc gtgacctcct gtagaccaga gagaggtaga gcatgaaaaa tgctcattga
 60
 gccgagatta tctgacagga ccaaagcata taaagttgac tgaagcagga gcaaacacgc
 120
 tgggtgaggg tcaagtgtg gggcagcagc aacaacaaac caaaaaaag ccctttgaac
 180
 tcccttaatg ttgcccaaag gttctggtag agaacaagtc acatgcctaa gaaggtcttt
 240
 taaagggcac tcttgagtt tcagcatttg gtccggggaa ttgcacaagg ctctgcttaa
 300
 atgcagagct ctttctagca tcttcatatt caaggcggaa aaactgagct tggcgaggaa
 360
 ccctgt
 366

<210> 1022

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1022
 Met Lys Met Leu Glu Arg Ala Leu His Leu Ser Arg Ala Leu Cys Asn
 1 5 10 15
 Ser Pro Asp Gln Met Leu Lys Leu Gln Glu Cys Pro Leu Lys Asp Leu
 20 25 30
 Leu Arg His Val Thr Cys Ser Leu Pro Glu Pro Leu Gly Asn Ile Lys
 35 40 45
 Gly Val Gln Arg Ala Phe Phe Trp Phe Val Val Ala Ala Ala Pro Ala
 50 55 60
 Leu Asp Pro Gln Pro Ala Cys Leu Leu Leu Leu Gln Ser Thr Leu Tyr
 65 70 75 80
 Ala Leu Val Leu Ser Asp Asn Leu Gly Ser Met Ser Ile Phe His Ala
 85 90 95
 Leu Pro Leu Ser Gly Leu Gln Glu Val Thr Thr Gln Leu
 100 105

<210> 1023
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1023
 gccgggcttc gggctctctga agcgatcaac ctggccgact cggatgcaga tctggacggc
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 ggcatacctga ccatacagca gaccaagttt ggcaagtccc gcatggtgcc gctacacccc
 120
 agcgtgatcg gtccgatggc agcctaccgg gccttgccgc gccagtacgt gcctgcgaag
 180
 ccgcagatga cattcttcgt gggctcgcgt ggcgtgcacc ggggtgaacc gctgggagat
 240
 aggcaggtgc atcgagtgtt ctgtcagctg cgcgagcaat tgggttgat cgatcgcggc
 300
 ggccatggcc gaccgcgggt gcatgacctg cgccatagct tcgccgtgag acggatgatc
 360
 ctgtggcacc agcagggagc gaaccttgac caacgaatgc tggccctgtc cacgtacatg
 420
 ggccac
 426

<210> 1024
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1024
 Ala Gly Leu Arg Val Ser Glu Ala Ile Asn Leu Ala Asp Ser Asp Ala
 1 5 10 15
 Asp Leu Asp Gly Gly Ile Leu Thr Ile Gln Gln Thr Lys Phe Gly Lys
 20 25 30
 Ser Arg Met Val Pro Leu His Pro Ser Val Ile Gly Pro Met Ala Ala

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      35      40      45
Tyr Arg Ala Leu Arg Arg Gln Tyr Val Pro Ala Lys Pro Gln Met Thr
  50      55      60
Phe Phe Val Gly Ser Arg Gly Val His Arg Gly Glu Pro Leu Gly Asp
  65      70      75      80
Arg Gln Val His Arg Val Phe Cys Gln Leu Arg Glu Gln Leu Gly Trp
      85      90      95
Ile Asp Arg Gly Gly His Gly Arg Pro Arg Val His Asp Leu Arg His
      100      105      110
Ser Phe Ala Val Arg Arg Met Ile Leu Trp His Gln Gln Gly Ala Asn
      115      120      125
Leu Asp Gln Arg Met Leu Ala Leu Ser Thr Tyr Met Gly His
      130      135      140

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<210> 1025

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1025

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  120
gatagcggcg ctgcgtacgc gatgatggat gagccgtggg gggaagggcg cgtcgccctcg
  180
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  240
ccactcctga agagccgccc gttcttcgtg gacatcctga ccctgetgag cagccactgc
  300
cagctctgcc ctgcagcccc gcacctggcc gtctacctgc tggaccactt catggatcgc
  360
tacaacgtca ccacctccaa gcagctctac accgtggccc tctcctgcct cctgcttgca
  420
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<210> 1026

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1026

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Cys Thr Leu Arg Glu Lys Glu Leu Lys Leu Pro Thr Phe Arg Ala His
      20      25      30
Ser Pro Leu Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu
      35      40      45
Leu Ser Ser His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val
      50      55      60
Tyr Leu Leu Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys

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65		70		75		80									
Gln	Leu	Tyr	Thr	Val	Ala	Val	Ser	Cys	Leu	Leu	Leu	Ala	Ser	Lys	Phe
				85					90					95	
Glu	Asp	Arg	Glu	Asp	His	Val	Pro	Lys	Leu	Glu	Gln	Ile	Asn	Ser	Thr
			100					105					110		
Arg	Ile	Leu	Ser	Ser	Gln	Asn	Phe	Thr	Leu	Thr	Lys	Lys			
		115					120					125			

<210> 1027

<211> 465

<212> DNA

<213> Homo sapiens

<400> 1027

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120
gtgctgggca gcctgggtgaa caccngtcct gaagcacatc atnctggct gaaggtcac
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300
ttccacatga cgactgaggc ccaagccacc atccgcatgg acaccagtgc aagtggcccc
360
acccgcctgg tctcagtgat ctgtgccacc agccatggga gcctgcgcat ccaactgctg
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<210> 1028

<211> 155

<212> PRT

<213> Homo sapiens

<400> 1028

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Asn	Ala	Thr	Ser	Ile	Leu	Gln	Gln	Leu	Pro	Leu	Leu	Lys	Ala	Met	Arg
			20					25					30		
Glu	Lys	Pro	Ala	Gly	Gly	Ile	Pro	Val	Leu	Gly	Ser	Leu	Val	Asn	Thr
		35				40					45				
Xaa	Pro	Glu	Ala	His	His	Xaa	Trp	Leu	Lys	Val	Ile	Thr	Ala	Asn	Ile
	50					55				60					
Leu	Gln	Leu	Gln	Val	Lys	Pro	Ser	Ala	Asn	Asp	Gln	Glu	Leu	Leu	Val
65				70				75					80		
Lys	Ile	Pro	Leu	Asp	Met	Val	Ala	Gly	Phe	Asn	Thr	Pro	Leu	Val	Lys
			85					90					95		
Thr	Ile	Val	Glu	Phe	His	Met	Thr	Thr	Glu	Ala	Gln	Ala	Thr	Ile	Arg
		100						105					110		
Met	Asp	Thr	Ser	Ala	Ser	Gly	Pro	Thr	Arg	Leu	Val	Leu	Ser	Asp	Cys
		115					120					125			
Ala	Thr	Ser	His	Gly	Ser	Leu	Arg	Ile	Gln	Leu	Leu	His	Lys	Leu	Ser

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Phe Lys Leu Asn Ala Ser Ala Lys Gln Val Met
145 150 155

<210> 1029
<211> 479
<212> DNA
<213> Homo sapiens

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120
tattactaac caagtgagga aaattatccc tagcaggtcc agatgaccgt gtgcatgaat
180
cacagggaga ccctaaagga tttcctcctg taaagctctt tccccaccta tttgctactg
240
cctgaaattg ctttagcagg aaacagaatc tctcatgcca caagtgagca taaagtttaa
300
aatgtaaata ctctaggaaa aggcaactca tctcttaaata tctctccaag gttcaaatcc
360
tttccaaaga ggaggctttt gtataagtca gaaggcccag tccctgaagg tcatggaaaa
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479

<210> 1030
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1030
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Ala Asn Arg Trp Gly Lys Ser Phe Thr Gly Gly Asn Pro Leu Gly Ser
35 40 45
Pro Cys Asp Ser Cys Thr Arg Ser Ser Gly Pro Ala Arg Asp Asn Phe
50 55 60
Pro His Leu Val Ser Asn Asn Asn Asn Asn Tyr Thr Leu Met Ser Ser
65 70 75 80
Cys Ser Ala Arg His Leu Trp Pro Val Leu Gly Arg Gln Tyr Leu Phe
85 90 95
Glu Pro Ser His Ser Ser Val Arg Thr Val Ser Leu His Ala
100 105 110

<210> 1031
<211> 322
<212> DNA
<213> Homo sapiens

<400> 1031

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 180
 ggggtggagcg tcgtcgtcga cccgctcgcc tatcaatggc gacaccctaa ctggcaaggc
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 cgcccctggc atgaggcggg gatttacgag ctgcacgttg gcgtactggg cgggtacgcc
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 322

<210> 1032

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1032

Xaa	Ala	Phe	Tyr	Val	Ser	Val	Glu	Leu	Glu	Asp	Gly	Lys	Ser	Ile	Ala
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Met	Leu	Pro	Gln	Ala	Asp	Gly	Trp	Phe	Glu	Val	Glu	Val	Lys	Cys	Pro
			20				25						30		
Ala	Gly	Thr	His	Tyr	Arg	Tyr	Asn	Ile	Asp	Gly	Glu	Thr	Asp	Val	Pro
		35				40				45					
Asp	Pro	Ala	Ser	Arg	Ala	Gln	Ala	Asn	Asp	Val	His	Gly	Trp	Ser	Val
	50					55				60					
Val	Val	Asp	Pro	Leu	Ala	Tyr	Gln	Trp	Arg	His	Pro	Asn	Trp	Gln	Gly
65				70				75						80	
Arg	Pro	Trp	His	Glu	Ala	Val	Ile	Tyr	Glu	Leu	His	Val	Gly	Val	Leu
			85					90						95	
Gly	Gly	Tyr	Ala	Ala	Val	Glu	Gln	Gln	Leu	Pro					
			100					105							

<210> 1033

<211> 579

<212> DNA

<213> Homo sapiens

<400> 1033

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 120
 aattcacatt caaatccatc acttttcaca taattgctgt taatatgaac gtcattgagtc
 180
 gttgttgctc gcggttgcca gtgggactcc ccatacacgg cagcgagaca tggaggaacc
 240
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 300
 aaggctgacc tggaagcgga ttcgcgagtc gatgacgtta tcgacgtcgg cgttcaggct
 360
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 420

aaagccgatac gaggaatctt tttctgcggc accgggatgg gcatggccat cacggccaac
 480
 aagggtgccag gcattcgcgc ctgcaccgcc cacgactcct tctccgtaga gcgggtcatc
 540
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 579

<210> 1034
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1034
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 Lys Asp Val Val Lys Ala Asp Leu Glu Ala Asp Ser Arg Val Asp Asp
 20 25 30
 Val Ile Asp Val Gly Val Gln Ala Gly Asp Asp Thr Leu Tyr Pro Arg
 35 40 45
 Ile Gly Ile Lys Gly Ala His Val Ile Lys Asp Gly Lys Ala Asp Arg
 50 55 60
 Gly Ile Phe Phe Cys Gly Thr Gly Met Gly Met Ala Ile Thr Ala Asn
 65 70 75 80
 Lys Val Pro Gly Ile Arg Ala Cys Thr Ala His Asp Ser Phe Ser Val
 85 90 95
 Glu Arg Leu Ile Met Ser Asn Asp Ala His Val Leu Cys Leu Gly Gln
 100 105 110
 Arg

<210> 1035
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1035
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 gtgtgtatan gaatgtgtgt atgtgtantg gaatgtgtgt gtgtantgga agctgtgtgc
 120
 atatgtnaat gtctgtgtgc atgtacnga atgtgcgcgt gtatggaatg tatctgtgta
 180
 tgtgtatgga ccgtttgtgt gattatgcaa tatgtccgtg tgtgcgtatg gagtgtctca
 240
 gtatggcatg tgtgtgtgta tctactgtgc gtctctgtgt gtgtantgac atgcatatgt
 300
 atagaaagcg tctgcgctgt gtgcatgtgt gtcagtatcg aacgagtcgg agatgtggta
 360
 atn
 363

<210> 1036
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1036

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Xaa Ala Cys Asn Val Cys Val Cys Met Xaa Pro Cys Leu Cys Val Cys
 1           5           10           15
Met Xaa Ile Cys Val Cys Ile Xaa Met Cys Val Cys Val Xaa Glu Cys
      20           25           30
Val Cys Val Xaa Glu Ala Val Cys Ile Cys Xaa Cys Leu Cys Ala Cys
      35           40           45
Thr Xaa Met Cys Ala Cys Met Glu Cys Ile Cys Val Cys Val Trp Thr
      50           55           60
Val Cys Val Ile Met Gln Tyr Val Arg Val Cys Val Trp Ser Val Ser
65           70           75           80
Val Trp His Val Cys Val Tyr Leu Leu Cys Val Ser Val Cys Val Xaa
      85           90           95
Thr Cys Ile Cys Ile Glu Ser Val Cys Ala Val Cys Met Cys Val Ser
      100          105          110
Ile Glu Arg Val Gly Asp Val Val Xaa
      115          120

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<210> 1037

<211> 5832

<212> DNA

<213> Homo sapiens

<400> 1037

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120
gcgtatagtg ggggtgcccag tgcaagctac agcgggccag ggcccgggat gggatatcagt
180
gccacaacc agatgcatgg acaagggcc aagccagccat gtggtgctgt gccctggga
240
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420
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540
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600
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720
acccaggca acctgccagt cccttcccca atgtcccca gctctgctag catctcctca
780
tttcatggag atgaaagtga tagcattagc agcccaggct ggccaaagac tccatcaagc
840

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cctaagtcca gctcctccac cactactggg gagaagatca cgaaggtgta cgagctgggg
900
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1020
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1080
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5700

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 5820
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 5832

<210> 1038

<211> 1485

<212> PRT

<213> Homo sapiens

<400> 1038

Pro	Ser	Pro	Gly	Gly	Gln	Met	His	Ala	Gly	Ile	Ser	Ser	Phe	Gln	Gln
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Ser	Asn	Ser	Ser	Gly	Thr	Tyr	Gly	Pro	Gln	Met	Ser	Gln	Tyr	Gly	Pro
			20					25					30		
Gln	Gly	Asn	Tyr	Ser	Arg	Pro	Pro	Ala	Tyr	Ser	Gly	Val	Pro	Ser	Ala
		35					40				45				
Ser	Tyr	Ser	Gly	Pro	Gly	Pro	Gly	Met	Gly	Ile	Ser	Ala	Asn	Asn	Gln
	50					55					60				
Met	His	Gly	Gln	Gly	Pro	Ser	Gln	Pro	Cys	Gly	Ala	Val	Pro	Leu	Gly
65					70				75					80	
Arg	Met	Pro	Ser	Ala	Gly	Met	Gln	Asn	Arg	Pro	Phe	Pro	Gly	Asn	Met
				85					90					95	
Ser	Ser	Met	Thr	Pro	Ser	Ser	Pro	Gly	Met	Ser	Gln	Gln	Gly	Gly	Pro
			100					105					110		
Gly	Met	Gly	Pro	Pro	Met	Pro	Thr	Val	Asn	Arg	Lys	Ala	Gln	Glu	Ala
	115					120					125				
Ala	Ala	Ala	Val	Met	Gln	Ala	Ala	Ala	Asn	Ser	Ala	Gln	Ser	Arg	Gln
	130					135					140				
Gly	Ser	Phe	Pro	Gly	Met	Asn	Gln	Ser	Gly	Leu	Met	Ala	Ser	Ser	Ser
145					150				155					160	
Pro	Tyr	Ser	Gln	Pro	Met	Asn	Asn	Ser	Ser	Ser	Leu	Met	Asn	Thr	Gln
				165					170					175	
Ala	Pro	Pro	Tyr	Ser	Met	Ala	Pro	Ala	Met	Val	Asn	Ser	Ser	Ala	Ala
			180					185					190		
Ser	Val	Gly	Leu	Ala	Asp	Met	Met	Ser	Pro	Gly	Glu	Ser	Lys	Leu	Pro
	195						200				205				
Leu	Pro	Leu	Lys	Ala	Asp	Gly	Lys	Glu	Glu	Gly	Thr	Pro	Gln	Pro	Glu
	210					215					220				
Ser	Lys	Ser	Lys	Asp	Ser	Tyr	Ser	Ser	Gln	Gly	Ile	Ser	Gln	Pro	Pro
225					230				235					240	
Thr	Pro	Gly	Asn	Leu	Pro	Val	Pro	Ser	Pro	Met	Ser	Pro	Ser	Ser	Ala
				245					250					255	
Ser	Ile	Ser	Ser	Phe	His	Gly	Asp	Glu	Ser	Asp	Ser	Ile	Ser	Ser	Pro
			260				265						270		
Gly	Trp	Pro	Lys	Thr	Pro	Ser	Ser	Pro	Lys	Ser	Ser	Ser	Ser	Thr	Thr
		275					280					285			
Thr	Gly	Glu	Lys	Ile	Thr	Lys	Val	Tyr	Glu	Leu	Gly	Asn	Glu	Pro	Glu
	290					295					300				
Arg	Lys	Leu	Trp	Val	Asp	Arg	Tyr	Leu	Thr	Phe	Met	Glu	Glu	Arg	Gly
305					310					315				320	
Ser	Pro	Val	Ser	Ser	Leu	Pro	Ala	Val	Gly	Lys	Lys	Pro	Leu	Asp	Leu

														325															330															335															
Phe	Arg	Leu	Tyr	Val	Cys	Val	Lys	Glu	Ile	Gly	Gly	Leu	Ala	Gln	Val																																												
														340															345															350															
Asn	Lys	Asn	Lys	Lys	Trp	Arg	Glu	Leu	Ala	Thr	Asn	Leu	Asn	Val	Gly																																												
														355															360															365															
Thr	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Leu	Lys	Lys	Gln	Tyr	Ile	Gln	Tyr																																												
														370															375															380															
Leu	Phe	Ala	Phe	Glu	Cys	Lys	Ile	Glu	Arg	Gly	Glu	Glu	Pro	Pro	Pro																																												
														385															390															395															400
Glu	Val	Phe	Ser	Thr	Gly	Asp	Thr	Lys	Lys	Gln	Pro	Lys	Leu	Gln	Pro																																												
														405															410															415															
Pro	Ser	Pro	Ala	Asn	Ser	Gly	Ser	Leu	Gln	Gly	Pro	Gln	Thr	Pro	Gln																																												
														420															425															430															
Ser	Thr	Gly	Ser	Asn	Ser	Met	Ala	Glu	Val	Pro	Gly	Asp	Leu	Lys	Pro																																												
														435															440															445															
Pro	Thr	Pro	Ala	Ser	Thr	Pro	His	Gly	Gln	Met	Thr	Pro	Met	Gln	Gly																																												
														450															455															460															
Gly	Arg	Ser	Ser	Thr	Ile	Ser	Val	His	Asp	Pro	Phe	Ser	Asp	Val	Ser																																												
														465															470															475															480
Asp	Ser	Ser	Phe	Pro	Lys	Arg	Asn	Ser	Met	Thr	Pro	Asn	Ala	Pro	Tyr																																												
														485															490															495															
Gln	Gln	Gly	Met	Ser	Met	Pro	Asp	Val	Met	Gly	Arg	Met	Pro	Tyr	Glu																																												
														500															505															510															
Pro	Asn	Lys	Asp	Pro	Phe	Gly	Gly	Met	Arg	Lys	Val	Pro	Gly	Ser	Ser																																												
														515															520															525															
Glu	Pro	Phe	Met	Thr	Gln	Gly	Gln	Met	Pro	Asn	Ser	Ser	Met	Gln	Asp																																												
														530															535															540															
Met	Tyr	Asn	Gln	Ser	Pro	Ser	Gly	Ala	Met	Ser	Asn	Leu	Gly	Met	Gly																																												
														545															550															555															560
Gln	Arg	Gln	Gln	Phe	Pro	Tyr	Gly	Ala	Ser	Tyr	Asp	Arg	Arg	His	Glu																																												
														565															570															575															
Pro	Tyr	Gly	Gln	Gln	Tyr	Pro	Gly	Gln	Gly	Pro	Pro	Ser	Gly	Gln	Pro																																												
														580															585															590															
Pro	Tyr	Gly	Gly	His	Gln	Pro	Gly	Leu	Tyr	Pro	Gln	Gln	Pro	Asn	Tyr																																												
														595															600															605															
Lys	Arg	His	Met	Asp	Gly	Met	Tyr	Gly	Pro	Pro	Ala	Lys	Arg	His	Glu																																												
														610															615															620															
Gly	Asp	Met	Tyr	Asn	Met	Gln	Tyr	Ser	Ser	Gln	Gln	Gln	Glu	Met	Tyr																																												
														625															630															635															640
Asn	Gln	Tyr	Gly	Gly	Ser	Tyr	Ser	Gly	Pro	Asp	Arg	Arg	Pro	Ile	Gln																																												
														645															650															655															
Gly	Gln	Tyr	Pro	Tyr	Pro	Tyr	Ser	Arg	Glu	Arg	Met	Gln	Gly	Pro	Gly																																												
														660															665															670															
Gln	Ile	Gln	Thr	His	Gly	Ile	Pro	Leu	Gln	Met	Met	Gly	Gly	Pro	Leu																																												
														675															680															685															
Gln	Ser	Ser	Ser	Ser	Glu	Gly	Pro	Gln	Gln	Asn	Met	Trp	Ala	Ala	Arg																																												
														690															695															700															
Asn	Asp	Met	Pro	Tyr	Pro	Tyr	Gln	Asn	Arg	Gln	Gly	Pro	Gly	Gly	Pro																																												
														705															710															715															720
Thr	Gln	Ala	Pro	Pro	Tyr	Pro	Gly	Met	Asn</																																																		

	755		760		765		
Thr	Arg	Pro	Pro	Gln	Pro	Ser	Tyr
770							775
His	Ile	Ser	Arg	Ala	Pro	Ser	Pro
785							790
Asn	Arg	Met	Ser	Pro	Ser	Lys	Ser
							805
Gln	Lys	Val	Met	Pro	Thr	Val	Pro
							820
Pro	Gln	Pro	Pro	Pro	Ile	Arg	Arg
							835
Val	Glu	Ala	Ser	Gln	Pro	Val	Leu
							850
Lys	Asp	Ile	Val	Thr	Pro	Glu	Ala
865							870
Ser	Gly	Leu	Leu	Ala	Glu	Ser	Thr
							885
Leu	Leu	Tyr	Asp	Asp	Ser	Thr	Val
							900
Ser	Gly	Phe	Leu	Glu	Leu	Leu	Val
							915
Asp	Ile	Phe	Gly	Ile	Leu	Met	Glu
							930
Lys	Ala	Leu	Asp	His	Asn	Ala	Ala
945							950
Ala	Asp	Asp	Ser	Gly	Lys	Glu	Glu
							965
Asp	Glu	Glu	Asp	Glu	Glu	Asp	Glu
							980
Ser	Asp	Glu	Lys	Ser	Ser	Ile	Ala
							995
Asp	Pro	Lys	Glu	Lys	Pro	Lys	Gln
							1010
Ile	Lys	Ile	Val	Lys	Lys	Asn	Asn
1025							1030
Lys	Leu	Gly	Arg	Val	Gln	Glu	Phe
							1045
Leu	Gly	Gly	Gly	Asp	Thr	Thr	Glu
							1060
Lys	Met	Glu	Ile	Pro	Pro	Arg	Arg
							1075
Ala	Gly	Lys	Lys	Lys	Glu	Leu	Ala
							1090
Gln	Glu	Lys	Ser	Ile	Ile	Ala	Thr
1105							1110
Pro	Gly	Ala	Leu	Pro	Glu	Asp	Ala
							1125
Ser	Lys	Phe	Pro	Phe	Gly	Ile	Gln
							1140
Lys	Leu	Leu	Glu	Asp	Glu	Pro	Arg
							1155
Thr	Ile	Ala	His	Trp	Gln	Asp	Ser
							1170
Ser	Asn	Ile	Val	Arg	Ser	Leu	Ser
							1175

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1185          1190          1195          1200
Met Ser Lys His Pro Gly Leu Val Leu Ile Leu Gly Lys Leu Ile Leu
          1205          1210          1215
Leu His His Glu His Pro Glu Arg Lys Arg Ala Pro Gln Thr Tyr Glu
          1220          1225          1230
Lys Glu Glu Asp Glu Asp Lys Gly Val Ala Cys Ser Lys Asp Glu Trp
          1235          1240          1245
Trp Trp Asp Cys Leu Glu Val Leu Arg Asp Asn Thr Leu Val Thr Leu
          1250          1255          1260
Ala Asn Ile Ser Gly Gln Leu Asp Leu Ser Ala Tyr Thr Glu Ser Ile
1265          1270          1275          1280
Cys Leu Pro Ile Leu Asp Gly Leu Leu His Trp Met Val Cys Pro Ser
          1285          1290          1295
Ala Glu Ala Gln Asp Pro Phe Pro Thr Val Gly Pro Asn Ser Val Pro
          1300          1305          1310
Ser Pro Gln Arg Leu Val Leu Glu Thr Leu Cys Lys Leu Ser Ile Gln
          1315          1320          1325
Asp Asn Asn Val Asp Leu Ile Leu Ala Thr Pro Pro Phe Ser Arg Gln
          1330          1335          1340
Glu Lys Phe Tyr Ala Thr Leu Val Arg Tyr Val Gly Asp Arg Lys Asn
1345          1350          1355          1360
Pro Val Cys Arg Glu Met Ser Met Ala Leu Leu Ser Asn Leu Ala Gln
          1365          1370          1375
Gly Asp Ala Leu Ala Ala Arg Ala Ile Ala Val Gln Lys Gly Ser Ile
          1380          1385          1390
Gly Asn Leu Ile Ser Phe Leu Glu Asp Gly Val Thr Met Ala Gln Tyr
          1395          1400          1405
Gln Gln Ser Gln His Asn Leu Met His Met Gln Pro Pro Pro Leu Glu
          1410          1415          1420
Pro Pro Ser Val Asp Met Met Cys Arg Ala Ala Lys Ala Leu Leu Ala
1425          1430          1435          1440
Met Ala Arg Val Asp Glu Asn Arg Ser Glu Phe Leu Leu His Glu Gly
          1445          1450          1455
Arg Leu Leu Asp Ile Ser Ile Ser Ala Val Leu Asn Ser Leu Val Ala
          1460          1465          1470
Ser Val Ile Cys Asp Val Leu Phe Gln Ile Gly Gln Leu
          1475          1480          1485

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<210> 1039
 <211> 379
 <212> DNA
 <213> Homo sapiens

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<400> 1039
gcaggagcca gggatgctgc tgaacatccc gcagtgcacg agacaggcct ccaccacacg
60
gaattacctt ggcctgaggt gttacgagag cacagagaga aaccaggtac agacgcgggg
120
cagaggggag agaggggagag agtgtgagag ctaaggtttc gggagaagac tttgtggaaa
180
aagtcttttg ctgggtcctg caacatagcc aggattcagt gacaggtgag gaccactcca
240
gattttgtat gtattgaagg ccctgaatac ttttttgaaa gagaatgaca tgagtacacc
300

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tggtcagcca cacgtgagag gggttggagg agggaagtac cagaggcagg gagaccaggt

360

agaaagacct cgccatagt

379

<210> 1040

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1040

Met	Ala	Arg	Ser	Phe	Tyr	Leu	Val	Ser	Leu	Pro	Leu	Val	Leu	Pro	Ser
1				5					10					15	
Ser	Asn	Pro	Ser	His	Val	Trp	Leu	Thr	Arg	Cys	Thr	His	Val	Ile	Leu
			20					25					30		
Phe	Gln	Lys	Ser	Ile	Gln	Gly	Leu	Gln	Tyr	Ile	Gln	Asn	Leu	Glu	Trp
		35					40					45			
Ser	Ser	Pro	Val	Thr	Glu	Ser	Trp	Leu	Cys	Cys	Arg	Thr	Gln	Pro	Lys
	50					55					60				
Thr	Phe	Ser	Thr	Lys	Ser	Ser	Pro	Glu	Thr	Leu	Ala	Leu	Thr	Leu	Ser
65					70					75				80	
Pro	Ser	Leu	Pro	Ser	Ala	Pro	Arg	Leu	Tyr	Leu	Val	Ser	Leu	Cys	Ala
				85				90						95	
Leu	Val	Thr	Pro	Gln	Ala	Lys	Val	Ile	Pro	Cys	Gly	Gly	Gly	Leu	Ser
			100					105					110		
Arg	Ala	Leu	Arg	Asp	Val	Gln	Gln	His	Pro	Trp	Leu	Leu			
		115					120					125			

<210> 1041

<211> 388

<212> DNA

<213> Homo sapiens

<400> 1041

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gaaacggcgt acctgccgcg gctgttggtt tccttggccc tgaccatccc ggtgctcgcc
120
ttgtcgatga tcccggccct gcacttcccg cattggccgt tgtgggcgtt ggcgcttacc
180
accccggttg tggtctgggg tgcctggccg ctgcaccacg ccgcgtggac caacctgcgg
240
cacggcgccg ccatcatgga caccctgggtg tcgctcgccg tcctcacttc gtacctctgg
300
tcggtatgga tgctgaccac aggcggcgag cacctctacc tggaggtagc cgtccaccgt
360
cacgacgctg atcctggccg gcaaattt
388

<210> 1042

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1042
 Leu Val Ala Val Glu Ala Ile Gly Tyr Ile Ala Ser Ile Asp Lys Ala
 1 5 10 15
 Asp Met Ser Ile Glu Thr Ala Tyr Leu Pro Arg Leu Leu Val Ser Leu
 20 25 30
 Ala Leu Thr Ile Pro Val Leu Ala Leu Ser Met Ile Pro Ala Leu His
 35 40 45
 Phe Pro His Trp Pro Leu Trp Ala Leu Ala Leu Thr Thr Pro Val Val
 50 55 60
 Phe Trp Gly Ala Trp Pro Leu His His Ala Ala Trp Thr Asn Leu Arg
 65 70 75 80
 His Gly Ala Ala Ile Met Asp Thr Leu Val Ser Leu Gly Val Leu Thr
 85 90 95
 Ser Tyr Leu Trp Ser Val Trp Met Leu Thr Thr Gly Gly Glu His Leu
 100 105 110
 Tyr Leu Glu Val Ala Val His Arg His Asp Ala Asp Pro Gly Arg Gln
 115 120 125
 Ile

<210> 1043
 <211> 555
 <212> DNA
 <213> Homo sapiens

<400> 1043
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 60
 caggcggtcg cttcggcgcg tcttggggcc gaagtcgcga tggtcggttg cgtgggtacc
 120
 gatgcctacg gcgcgcaatt acgcgacgca ttgttggtgg aaggcatcga ttgccaggcc
 180
 gtcagcaccg tcgacggttc cagcgggtgtg gcgctgatcg tgggtggatga cagcagccag
 240
 aatgcgatcg ttatcgtcgc cggtagcaat ggcgagctga ctccggccaa gttacagacc
 300
 tttgacagcg tgctgcaggc tgccgacgtg attgtctgcc agcttgagac gccgatggac
 360
 actgtcggcc atgcgcctaa gcgcggtcgc gaactgggca agacgggtgat cctcaatccg
 420
 gcgccggcca gcggcccgtt gcctgaggat tggtagcccg ccatcgatta cctgattccc
 480
 aacgaaagcg aagcctcggc cttgagtggc gtggtggtgg attcactgga cagcgccaag
 540
 gtcgctgcta cgcg
 555

<210> 1044
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 1044
 Thr Gly Glu Thr Leu Ile Gly Gln Ser Phe Ser Thr Val Pro Gly Gly

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      1           5           10           15
Lys Gly Ala Asn Gln Ala Val Ala Ser Ala Arg Leu Gly Ala Glu Val
      20           25           30
Ala Met Val Gly Cys Val Gly Thr Asp Ala Tyr Gly Ala Gln Leu Arg
      35           40           45
Asp Ala Leu Leu Val Glu Gly Ile Asp Cys Gln Ala Val Ser Thr Val
      50           55           60
Asp Gly Ser Ser Gly Val Ala Leu Ile Val Val Asp Asp Ser Ser Gln
      65           70           75           80
Asn Ala Ile Val Ile Val Ala Gly Ser Asn Gly Glu Leu Thr Pro Ala
      85           90           95
Lys Leu Gln Thr Phe Asp Ser Val Leu Gln Ala Ala Asp Val Ile Val
      100          105          110
Cys Gln Leu Glu Thr Pro Met Asp Thr Val Gly His Ala Pro Lys Arg
      115          120          125
Gly Arg Glu Leu Gly Lys Thr Val Ile Leu Asn Pro Ala Pro Ala Ser
      130          135          140
Gly Pro Leu Pro Glu Asp Trp Tyr Ala Ala Ile Asp Tyr Leu Ile Pro
      145          150          155          160
Asn Glu Ser Glu Ala Ser Ala Leu Ser Gly Val Val Val Asp Ser Leu
      165          170          175
Asp Ser Ala Lys Val Ala Ala Thr Arg
      180          185

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<210> 1045

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1045

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ctattgccat actaccgccg cggcaaccta caggacatga tcaacgccaa cctcttcaat
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cactccaaat tccccgagac gcaccttatg aatctatttc tcggcgtctg caaggccctg
120
cgcgccatgc acgattacca cgcaccgccg gcagagcgca tgccaattgg gcaccgaagg
180
cagaccacca cccaggtgca aagcaacagt ggtagagcgg tcgctcatcg acgaaacgta
240
cggaagaaga cgaagagacg gagcaggaaa gacctgttat ggaatcacag aaccacatcg
300
ggcagggcgg cgagcacaaa accatatgcg catcgcgaca ttaaaccagg tacgtgctgc
360
aagctcctcg g
371

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<210> 1046

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1046

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Leu Leu Pro Tyr Tyr Arg Arg Gly Asn Leu Gln Asp Met Ile Asn Ala
1           5           10           15
Asn Leu Phe Asn His Ser Lys Phe Pro Glu Thr His Leu Met Asn Leu

```

	20		25		30										
Phe	Leu	Gly	Val	Cys	Lys	Ala	Leu	Arg	Ala	Met	His	Asp	Tyr	His	Ala
	35		40		45										
Pro	Pro	Ala	Glu	Arg	Met	Pro	Ile	Gly	His	Arg	Arg	Gln	Thr	Thr	Thr
	50		55		60										
Gln	Val	Gln	Ser	Asn	Ser	Gly	Arg	Ala	Val	Ala	His	Arg	Arg	Asn	Val
65			70		75									80	
Arg	Lys	Lys	Thr	Lys	Arg	Arg	Ser	Arg	Lys	Asp	Leu	Leu	Trp	Asn	His
			85		90									95	
Arg	Thr	Thr	Ser	Gly	Arg	Ala	Ala	Ser	Thr	Lys	Pro	Tyr	Ala	His	Arg
			100		105									110	
Asp	Ile	Lys	Pro	Gly	Thr	Cys	Cys	Lys	Leu	Leu					
	115				120										

<210> 1047

<211> 754

<212> DNA

<213> Homo sapiens

<400> 1047

natgcccaga aggacctgga cgaggcggtg ccagccctgg atgcggctct ggccagccta
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 cgcaacctca acaagaacga agtgaccag gtacgtgcca tgcagcggcc acccccgggt
 120
 gtgaaactgg tcatagaagc tgtgtgcatt atgaaaggca tcaagcccaa gaagggtgcct
 180
 ggagaaaagc caggcaccaa ggtggatgac tactgggagc ctggcaaggg gctgctgcag
 240
 gacccgggccc acttccttga gagcctcttc aagtttgaca aggacaacat tggagatgtg
 300
 gtgatcaaag ccatccagcc gtacatcgat aatgaagagt tccagccagc caccattgcc
 360
 aagggtgtcca agggttgccc cttcatttgg ccgtgggggg gggcaatgcc caagtacccc
 420
 tttgtggcca aggccgtgga gcccagcgg caagccctgc tggaggccca ggatgacctg
 480
 ggggtgacac agaggatcct ggatgaggca aaacagcgcc ttcgtgaggt ggaggacggc
 540
 atgccacaa tgcaggctaa gtaccgggaa tgcattacca agaaggagga gctggagctg
 600
 aagtgtgagc agtgtgagca gcggtgggc cacgctggca aggtgcgcac cctcctcctg
 660
 caaggcctgc aagcgggccc ggcccagaca ggggccagaa aggaccaggg cgccggtggg
 720
 tcctgggggtg gctgtccaac cccctccctg gcaa
 754

<210> 1048

<211> 251

<212> PRT

<213> Homo sapiens

<400> 1048

Xaa Ala Gln Lys Asp Leu Asp Glu Ala Leu Pro Ala Leu Asp Ala Ala

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	20							25					30		
Ala	Met	Gln	Arg	Pro	Pro	Pro	Gly	Val	Lys	Leu	Val	Ile	Glu	Ala	Val
	35						40					45			
Cys	Ile	Met	Lys	Gly	Ile	Lys	Pro	Lys	Lys	Val	Pro	Gly	Glu	Lys	Pro
	50					55					60				
Gly	Thr	Lys	Val	Asp	Asp	Tyr	Trp	Glu	Pro	Gly	Lys	Gly	Leu	Leu	Gln
65					70					75					80
Asp	Pro	Gly	His	Phe	Leu	Glu	Ser	Leu	Phe	Lys	Phe	Asp	Lys	Asp	Asn
			85						90					95	
Ile	Gly	Asp	Val	Val	Ile	Lys	Ala	Ile	Gln	Pro	Tyr	Ile	Asp	Asn	Glu
			100						105				110		
Glu	Phe	Gln	Pro	Ala	Thr	Ile	Ala	Lys	Val	Ser	Lys	Gly	Cys	Pro	Phe
	115							120				125			
Ile	Trp	Pro	Trp	Gly	Gly	Ala	Met	Pro	Lys	Tyr	Pro	Phe	Val	Ala	Lys
	130					135						140			
Ala	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Leu	Glu	Ala	Gln	Asp	Asp	Leu
145					150					155					160
Gly	Val	Thr	Gln	Arg	Ile	Leu	Asp	Glu	Ala	Lys	Gln	Arg	Leu	Arg	Glu
			165						170					175	
Val	Glu	Asp	Gly	Ile	Ala	Thr	Met	Gln	Ala	Lys	Tyr	Arg	Glu	Cys	Ile
			180						185				190		
Thr	Lys	Lys	Glu	Glu	Leu	Glu	Leu	Lys	Cys	Glu	Gln	Cys	Glu	Gln	Arg
	195							200					205		
Leu	Gly	His	Ala	Gly	Lys	Val	Arg	Thr	Leu	Leu	Leu	Gln	Gly	Leu	Gln
	210					215						220			
Ala	Gly	Pro	Ala	Gln	Thr	Gly	Ala	Arg	Lys	Asp	Gln	Gly	Ala	Gly	Gly
225					230					235					240
Ser	Trp	Gly	Gly	Cys	Pro	Thr	Pro	Ser	Leu	Ala					
			245						250						

<210> 1049

<211> 558

<212> DNA

<213> Homo sapiens

<400> 1049

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60atgctgcaga tccttacagg ctgactgcag ggtgtttcag attctcctgg agtcacacgt
120gccagcttga tttcaagaaa caactagaat aacagttttc tgataagaag tctatagcac
180tttatggctt acataatcca gagatagatg ggctgggcat gattccatt ttctgttggg
240gaaaccgact cacagagaag ttaagggaca agtataaagt gatgaaactg tgtactgaac
300ctcatgtctc ccagactccc ggggtccccg gctttttctc ggggcggccc cattcacatt
360gcaattcatg gccggggcaa atgtcacccc acagagatat taagcactcc aacactccat
420ccaccagggt gcagccaaag gattcagaag acaatgatca ttccatcagc atgcactatg
480

cagctaaaga aaggttttgg catgctctgc tttattgttt cacagaagat aagaaaataa

540

actgcaaagt aacttaag

558

<210> 1050

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1050

Met	Ile	Pro	Ile	Phe	Cys	Trp	Gly	Asn	Arg	Leu	Thr	Glu	Lys	Leu	Arg
1				5				10						15	
Asp	Lys	Tyr	Lys	Val	Met	Lys	Leu	Cys	Thr	Glu	Pro	His	Val	Ser	Gln
			20					25					30		
Thr	Pro	Gly	Ser	Pro	Gly	Phe	Phe	Ser	Gly	Arg	Pro	His	Ser	His	Cys
		35				40					45				
Asn	Ser	Trp	Pro	Gly	Gln	Met	Leu	Thr	His	Arg	Asp	Ile	Lys	His	Ser
	50				55					60					
Asn	Thr	Pro	Ser	Thr	Arg	Leu	Gln	Pro	Lys	Asp	Ser	Glu	Asp	Asn	Asp
65				70					75					80	
His	Ser	Ile	Ser	Met	His	Tyr	Ala	Ala	Lys	Glu	Arg	Phe	Trp	His	Ala
			85					90					95		
Leu	Leu	Tyr	Cys	Phe	Thr	Glu	Asp	Lys	Lys	Ile	Asn	Cys	Lys	Val	Thr
			100					105					110		

<210> 1051

<211> 317

<212> DNA

<213> Homo sapiens

<400> 1051

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120
ctcaagcgcc tggctgctgt catccgtcac gcacaggctg cacaagcggc ttaaggggag
180
ggccatgtac aaggtttatg gcgattacca gtcgggcaat tgctacaaga tcaagctgat
240
gctgcacctg ctggggcagg aatatcgctg gcacccgggg gacatcctca aggtgacacc
300
gagaccccg aattttt
317

<210> 1052

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1052

Ala	Leu	Ser	Arg	Asp	Val	Ala	Phe	Met	Pro	Gly	Glu	Pro	Phe	Phe	Ala
1				5				10					15		
Glu	Pro	Glu	Arg	Asn	Pro	Gly	Asn	Leu	Arg	Leu	Asn	Phe	Ser	His	Ile

	20		25		30
Ala	Pro	Glu	Arg	Leu	Asp
		Glu	Gly	Leu	Lys
				Arg	Leu
					Ala
					Ala
					Val
					Ile
	35		40		45
Arg	His	Ala	Gln	Ala	Ala
	50		55		

<210> 1053
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 1053
 caattggcta cgcgatccga acgggcgcat ggggtctctat gactggcaag ccgtcgctcg
 60
 cggggagtgg gccctcgact atgcctacgc gatgtcgggtg aacctgacca ccgagaaccg
 120
 gcgtgcctgg gaacgcgacc tgctcgagcg ttatctgtgg cgcctcgccg aagaggggtgt
 180
 cgccaaccgc cctcgttcg agcaagcgtg gctacgctac cggcaacagc cgttccacgt
 240
 cgggatcttc tcaactctga ccatcggcgc cggacgcttt caaccggcca tgcaaccggc
 300
 ggactcnnnn ccccnenc
 318

<210> 1054
 <211> 96
 <212> PRT
 <213> Homo sapiens

Met	Gly	Leu	Tyr	Asp	Trp	Gln	Ala	Val	Ala	Arg	Gly	Glu	Trp	Ala
1				5					10				15	
Asp	Tyr	Ala	Tyr	Ala	Met	Ser	Val	Asn	Leu	Thr	Thr	Glu	Asn	Arg
		20						25				30		
Ala	Trp	Glu	Arg	Asp	Leu	Leu	Glu	Arg	Tyr	Leu	Trp	Arg	Leu	Ala
		35					40				45			
Glu	Gly	Val	Ala	Asn	Pro	Pro	Ser	Phe	Glu	Gln	Ala	Trp	Leu	Arg
		50				55					60			
Arg	Gln	Gln	Pro	Phe	His	Val	Gly	Ile	Phe	Ser	Leu	Leu	Thr	Ile
65				70					75				80	
Ala	Gly	Arg	Phe	Gln	Pro	Ala	Met	Gln	Pro	Ala	Asp	Ser	Xaa	Pro
			85					90					95	

<210> 1055
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1055
 tacaatgtat catcaaccag aaatacaatg agaaccacct gccagtctcc caaatactat
 60
 ctgcagccac tcatttaact ctctggcta gctccacgtg ggccgtctga actctcttag
 120

aagaatcatc tctctgctca ggcaccggga gcaaggggca tctgtcgctc tgcagaacgg
180
aggggaccag gcctgatgaa caccatcctg ggcccagaaa cctgggaggg taaagagaac
240
tgccaggggt gaagtccaag gatgggaaaa aggcctccgg ggcagagtcc tgaaatgtca
300
gaagtacacc aaagaggaaa cagcatcacg ttattgctga ggcagggcct cattctgttg
360
ccaaggctgc agtgcagtgg tgacaccatg g
391

<210> 1056

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1056

Met	Val	Ser	Pro	Leu	His	Cys	Ser	Leu	Gly	Asn	Arg	Met	Arg	Pro	Cys
1				5				10						15	
Leu	Ser	Asn	Asn	Val	Met	Leu	Phe	Pro	Leu	Trp	Cys	Thr	Ser	Asp	Ile
		20						25					30		
Ser	Gly	Leu	Cys	Pro	Gly	Gly	Leu	Phe	Pro	Ile	Leu	Gly	Leu	His	Pro
		35					40					45			
Trp	Gln	Phe	Ser	Leu	Pro	Ser	Gln	Val	Ser	Gly	Pro	Arg	Met	Val	Phe
	50					55					60				
Ile	Arg	Pro	Gly	Pro	Leu	Arg	Ser	Ala	Glu	Arg	Gln	Met	Pro	Leu	Ala
65				70					75					80	
Pro	Gly	Ala													

<210> 1057

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1057

gaattccctg cgcgtgtgac gccggtcgcc gagcaactcg gcgtgtcgct gacgctgcat
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cccgatgatc cgccgcgtcc gctgttcggg ttgccgcgca ttgcgtccag cgccgaggac
120
tatcaggcgc tggtcgatgc ggtaccgtcc aaggcgaacg gcattctgcct gtgcacgggt
180
tcgctcggcg tgcgcgcgga gaacgatctg cctgaaatgg ccgaacgttt cggccgcgt
240
atcgcctttg cgcattctgcg cgcgaccaag cgcgacgccg atggcctgtc gtttcatgaa
300
tccgaccatc tcgacggcga tgtcgacatg gtcgcgtgct c
341

<210> 1058

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser
 1 5 10 15
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro
 20 25 30
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val
 35 40 45
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val
 50 55 60
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg
 65 70 75 80
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu
 85 90 95
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala
 100 105 110
 Cys

<210> 1059

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1059

nagctgaccg gctggcagat caacatcatg acgccggaag aaagcgtgaa ccgccgggaa
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 gtcgagcgtt cgggcctgcg caccacgttc atgaacaagc tggacgtcga tgaggaagtc
 120
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcccta cgtcccatg
 180
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgcccgt
 240
 gcccgcaatg cgctgctgac cgaggccatc gcccggaag agcgccttga gaccgcgcag
 300
 gatctgcttg aactcgaagg cgtgacgccg gaactggctg ccaagctggc cgagcgtcaa
 360
 gtgcgtacgc gt
 372

<210> 1060

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val
 1 5 10 15
 Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn
 20 25 30
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly
 35 40 45
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu
 50 55 60
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

65 70 75 80
 Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
 85 90 95
 Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
 100 105 110
 Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
 115 120

<210> 1061
 <211> 456
 <212> DNA
 <213> Homo sapiens

<400> 1061
 tctagactcc atggcaccgg gctgagcggg taagtaagaa agataaaaag tgccttttgc
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 cccttcgagg aaaccctttt gcaggccaag caagggctgc aagtgtttgg gagctgagag
 120
 gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
 180
 gggacacgaa gggctcttcg gaccctgtg cctcttctgc cccaagggcg agaagacggg
 240
 cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
 300
 ggtctgaacc tggatgggga gaagaaattg aagtgccttg gagacggggg ggcttaaaac
 360
 actagggagc ctcatcgccc agccttgggc ccactttcct ttcgatcgtg aggattccgc
 420
 accccgaagc cgtcttctcg gggctccggg gcgcgc
 456

<210> 1062
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1062
 Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
 1 5 10 15
 Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
 20 25 30
 Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
 35 40 45
 Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
 50 55 60
 Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
 65 70 75 80
 Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
 85 90 95
 Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
 100 105 110
 Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
 115 120 125

<210> 1063

<211> 3760

<212> DNA

<213> Homo sapiens

<400> 1063

ntagtagaga cagggtttca ccatgttggc caggctggc ttgaactcct gagcttgtga
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tccacccgcc tcagcctccc aaagtgtgg gattacaggc gtgacgactg caccagcct
120
taaggtctta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata
180
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag
240
attcagaaga atgagctttg taattcttaa aaattagtct cagaatagaa aggattttta
300
aagtaattga gtaaagtcac aggaaatgtg accatataaa ggaatggctc taaatgtatt
360
aatccagaag gaagcaacag gttaaacagt aagaggtaag aaacaaaaaa taaggaacga
420
gagagagaga gtgacaggga gagagagaca gagcggggaa ggagagaatg agaaggaaaa
480
tcaggaaaac gaggagaaac agaattaagg aggtgatact ggaatagtat cagaccattc
540
tgaatcaatt taagaattgc catgtctaat tcttatatgg aagatttgaa atacaaggat
600
attgaaagga ataacaaatt ataatgaatg catagaaatc cttatgtaat ccaaggctac
660
taatttgaag gaagacatca agaaaatgtg atctagaaat aaagggtgag attgctccat
720
ttacaaaatt attatgctct ataatcttcc catatgcaaa tatttcatat tccctctttt
780
gtcccatgga catatttcac agcaacaacg aatcaagtgc tgacctaaat ggggtatctg
840
ttaaaactta gtatattgat atccttcacc ccactccagg aacgttcgct acgctaggac
900
tgcattcttg gaacagaatt ttagagatga tcatctctta catcagaagc aggatctaaa
960
tgatccctgg atgcccattt tcttgaccct gctattgttg tgggtggcaa gataagagga
1020
gttgcacac agatgaaaaa gtaaggccga agaagaccag agaagagttg gttgaatgtg
1080
tagatataag atccatctgt gacattgtag aatgaaattt caccggcttc atagtccaag
1140
aaaatcccaa tgcagtgagg actttccagt tggagaagag gcactgatgg ggaggcaagg
1200
accatgtact cattcccttt cagcagccac agggcccaga cccattctc aggagatggc
1260
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1320
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1380
cagggccatg tgtcaaatcg ctcagggttg ttggggacat ccctccatgg ttctccatcc
1440

tgcacactgc gcaggtcggc ggtcaagagc agactcgggt gcgccgtggc gggatccagc
1500
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1860
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1920
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1980
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2040
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2160
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2220
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2280
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2340
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2460
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2580
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2640
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2700
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2760
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2820
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2880
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2940
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3000
gaagattata gagcataata attttgtaaa tggagcaatc tcaacctcta tttctagatc
3060

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 3180
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 3360
 ctgtttaacc tgttgcttcc ttctggatta atacatttag agccattcct ttatatgggc
 3420
 acatttecta tgactttact caattacttt taaaatcctt tctattctga gactaatttt
 3480
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 3540
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 3600
 tgcagatatt tactgggttat aagaccttaa ggctgggtgc agtgggtcac gcctgtgggc
 3660
 ccagcgcttt ggggggctga ggcgggtgga tcacaggtc gggagttcgg ggccagcctg
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 3760

<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

Met	Gln	Gly	His	Val	Ser	Asn	Arg	Ser	Gly	Leu	Leu	Gly	Thr	Ser	Leu
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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe
		35				40						45			
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50				55				60						
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65				70				75						80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100					105					110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115				120					125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130				135					140					
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150				155						160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165				170					175			
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

180 185 190
 Glu Glu Gln Arg Gln Leu Arg Arg Leu Glu Ala Glu Glu Arg Ala Thr
 195 200 205
 Leu Gln Arg Leu Arg Glu Ser Lys Ser Arg Leu Val Gln Gln Ser Lys
 210 215 220
 Ala Leu Lys Glu Leu Ala Asp Glu Leu Gln Glu Arg Cys Gln Arg Pro
 225 230 235 240
 Ala Leu Gly Leu Leu Glu Gly Val Arg Gly Val Leu Ser Arg Ser Lys
 245 250 255
 Ala Val Thr Arg Leu Glu Ala Glu Asn Ile Pro Met Glu Leu Lys Thr
 260 265 270
 Ala Cys Cys Ile Pro Gly Arg Arg Glu Leu Leu Arg Lys Phe Gln Val
 275 280 285
 Asp Val Lys Leu Asp Pro Ala Thr Ala His Pro Ser Leu Leu Leu Thr
 290 295 300
 Ala Asp Leu Arg Ser Val Gln Asp Gly Glu Pro Trp Arg Asp Val Pro
 305 310 315 320
 Asn Asn Pro Glu Arg Phe Asp Thr Trp Pro Cys Ile Leu Gly Leu Gln
 325 330 335
 Ser Phe Ser Ser Gly Arg His Tyr Trp Glu Val Leu Val Gly Glu Gly
 340 345 350
 Ala Glu Trp Gly Leu Gly Val Cys Gln Asp Thr Leu Pro Arg Lys Gly
 355 360 365
 Glu Thr Met Pro Ser Pro Glu Asn Gly Val Trp Ala Leu Trp Leu Leu
 370 375 380
 Lys Gly Asn Glu Tyr Met Val Leu Ala Ser Pro Ser Val Pro Leu Leu
 385 390 395 400
 Gln Leu Glu Ser Pro Arg Cys Ile Gly Ile Phe Leu Asp Tyr Glu Ala
 405 410 415
 Gly Glu Ile Ser Phe Tyr Asn Val Thr Asp Gly Ser Tyr Ile Tyr Thr
 420 425 430
 Phe Asn Gln Leu Phe Ser Gly Leu Leu Arg Pro Tyr Phe Phe Ile Cys
 435 440 445
 Asp Ala Thr Pro Leu Ile Leu Pro Pro Thr Thr Ile Ala Gly Ser Gly
 450 455 460
 Asn Trp Ala Ser Arg Asp His Leu Asp Pro Ala Ser Asp Val Arg Asp
 465 470 475 480
 Asp His Leu

<210> 1065

<211> 892

<212> DNA

<213> Homo sapiens

<400> 1065

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 taccatgctt cacaaggga gaagatcaaa gtgacctcc cccatggctt tggaaccttc
 120
 ttgtccagtc tggaaggggg gaagaagaga tgagggaag gctgtccagg ggggtgcaag
 180
 gccctagaga cccagcagag aaggactct ggccactgaa ggggccctcc cattgtggct
 240

ctggttccct agagcagctc cagcttcttg gcctcccccg tctgatgctt agctcatccc
 300
 atccccctgga gtgctgtgga gcttagatga aacagcccag tgctcactct tcaatgagcc
 360
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg
 420
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga
 480
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc
 540
 agtgaagggt gaggaatcat ttctctatgg cccaagacgt ttctctctgc agttgtcatg
 600
 ttagtacctg ccagcttttc ctctcttaca taaatttcat gccagagcct ggaaatgtgt
 660
 gccctttgta ggaggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccgt
 720
 ccctctcatt gcaggaggcg catgaagcgt gtctgggacc gagctgtgga gttcctggcc
 780
 tccaacgaat cccggatcca gacggagtcc caccgcgttg caggagagga catgctgggtg
 840
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 892

<210> 1066

<211> 76

<212> PRT

<213> Homo sapiens

<400> 1066

Met	Cys	Ala	Leu	Cys	Arg	Arg	Gly	Ile	Thr	Gly	Trp	Leu	Thr	Ser	Ala
1				5					10					15	
Val	Pro	Gly	Arg	Ala	Arg	Pro	Ser	His	Cys	Arg	Arg	Arg	Met	Lys	Arg
			20					25					30		
Val	Trp	Asp	Arg	Ala	Val	Glu	Phe	Leu	Ala	Ser	Asn	Glu	Ser	Arg	Ile
			35				40				45				
Gln	Thr	Glu	Ser	His	Arg	Val	Ala	Gly	Glu	Asp	Met	Leu	Val	Leu	Arg
		50				55				60					
Trp	Thr	Lys	Pro	Ser	Ser	Phe	Ser	Asp	Ser	Glu	Arg				
65					70					75					

<210> 1067

<211> 418

<212> DNA

<213> Homo sapiens

<400> 1067

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 120
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac
 180
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc
 240

gctgccatcg acgtcgaaact ggtgtgccc gaaggccatg ccctcataaa cgaggcggtc
300
cggcacgccg agcaatccgg ggatactgac gcgatcacgg ctctgcgcga gaccgatgcc
360
aacctaacc ttgaccgtgc ccccgactcg ctacaacagg tcatcaacac ctacgcgt
418

<210> 1068
<211> 139
<212> PRT
<213> Homo sapiens

<400> 1068
Glu Phe Glu Val Thr Ala Asn Val Phe Arg Glu Gly His Asp Ala Val
1 5 10 15
Gly Ala Ser Val Val Leu Thr Asp Pro Glu Gly Asn Arg His Leu Thr
20 25 30
Asp Met His Gln Val Glu Pro Trp Gly Leu Asp Ile Trp Lys Ala Arg
35 40 45
Val Ser Ala Asp Ile Glu Gly Asp Trp Thr Met His Val Glu Gly Trp
50 55 60
Ser Asp Thr Trp Gly Thr Trp His His Asn Ala Asn Ala Lys Leu Ala
65 70 75 80
Ala Ala Ile Asp Val Glu Leu Val Cys Ala Glu Gly His Ala Leu Ile
85 90 95
Asn Glu Ala Val Arg His Ala Glu Gln Ser Gly Asp Thr Asp Ala Ile
100 105 110
Thr Ala Leu Arg Glu Thr Asp Ala Asn Leu Thr Leu Asp Arg Ala Pro
115 120 125
Asp Ser Leu Gln Gln Val Ile Asn Thr Tyr Ala
130 135

<210> 1069
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1069
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cagttcatat gccgtcactc ccagggaacca ccagtcaaca gcaaaggaat agcctgctcc
120
ttttctggag ctgaacatct caggtgccat gtaaggcttg gtgccagcca tgggtggagac
180
ctgcgttatc acctgcaaca gaacgtccac ttcaaggaag aaacagtga gctcttcatc
240
tgtgagctgg tcatggccct ggactacctg cagaaccagc gcatcattca cagggatatg
300
aagcctgaca atattttact tgacgaacat gggcacgtgc acatcacaga tttcaacatt
360
gctgcgatgc t
371

<210> 1070

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1070
 Xaa Tyr Asn Phe Leu Ala Gly Ser Thr Gly Ala Asn Met Ile Arg Ser
 1 5 10 15
 Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
 20 25 30
 Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
 35 40 45
 Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
 50 55 60
 Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
 65 70 75 80
 Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
 85 90 95
 His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
 100 105 110
 Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
 115 120

<210> 1071
 <211> 998
 <212> DNA
 <213> Homo sapiens

<400> 1071
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 ggagtttcgt caaggaagac ggacaaatcg tcattgatga gaatggcaac agggtttgat
 120
 cccacccgaa gtacgtggcc ttggagtgcc attcgcactc cacttggcca ccgtttgcat
 180
 tcgacctaac cagcaattgc atctcgtttg acctgctcgc gttgtcaaca tcatagcaac
 240
 gagcggccaa tagcagagtt ctggtcatcc tgttccgccc ttctctctat ttgaagcctc
 300
 agtttcagca aagagctgtt tatgagtttt ccgtcaaacg gcgcttgat aggcataagg
 360
 ggtataccta tgatgcgtgt attcacagtt aaaaagggtt ctctcatggg ccatacagct
 420
 tcaaacaaag acgatcttct caaacgcgtg aaacgcacgc cggggcaaat ccaggccgtt
 480
 gagcgtgcac tggagtcgga tgccgattgc gcgaaaacat tgcattctgt agctgccaca
 540
 cgtggagcta tcaacggctt gatggacgaa attattgagg atcacgccag aaaacatgtg
 600
 gcgagcccaa cgcttagcga ttaataacgc aacaagggtg tcgaagagct tcttgaagcc
 660
 attcgccgct actccaagtg aagaatccag gtacatgtcc atgagtagca gcccgaatat
 720
 cgagattagc cacatacatg accatgtgtt ccttgggtca gcacgcgaag aaaatgcaa
 780

gcgtaccctt tgggttggtg cgcttacggt ggtgatgatg gttggcgaaa tcgtcgccgg
840
ctatctcact ggctcaatgg ctttacttgc cgacggggtt tcacaaggca accccatgca
900
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960
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998

<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

Met	Gly	His	Thr	Ala	Ser	Asn	Lys	Asp	Asp	Leu	Leu	Lys	Arg	Val	Lys
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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
		20					25					30			
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35				40					45				
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
	50				55					60					
Val	Ala	Ser	Pro	Thr	Leu	Ser	Asp								
65					70										

<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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tacaatggac aattttctat tcttcaagta cactcttccc atgtcccaac tgggatgctt
120
ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tcctacttca
180
gaaagtcttg tttctccata tccttcgtaa ccaccacctg gtgcacatgc tgaaggcaga
240
attcattgtc tcctctcctt cactctcgaa tagctttgcc cagaccctca ggtactcctt
300
catcctctgt ataatatctg gttttcacct ctttatgaac tcttttgat totcattact
360
ggctctggaa cccagaacat accacgggtt caaggatatgt tttaatgaat tgaatggaat
420
aaattttggt gtgcttatgc agatacagat gccactaaac actgatca
468

<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1074

Met Asp Asn Phe Leu Phe Phe Lys Tyr Thr Leu Pro Met Ser Gln Leu
 1 5 10 15
 Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
 20 25 30
 Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
 35 40 45
 Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
 50 55 60
 Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
 65 70 75 80
 Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
 85 90 95
 Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
 100 105 110
 Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
 115 120 125
 Met Pro Leu Asn Thr Asp
 130

<210> 1075

<211> 1633

<212> DNA

<213> Homo sapiens

<400> 1075

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 120
 gcgcctgctg atcctgcccc aggaggagga ctatggcttt gacatcgagg agaagaacaa
 180
 ggctgtggtg gtgaagtccg tccagagggg cttgctggct gaggtggctg gcctgcaggt
 240
 ggggaggaag atctactcca tcaatgagga cctgggtgtt ctgcggccgt tttcagaggt
 300
 ggagtccatc ctcaaccagt ctttctgctc ccgcgcacct ctgcgcctcc tgggtggccac
 360
 gaaggccaaa gagatcatca aaatccccga ccagccggac acactgtgct tccagattcg
 420
 tggagctgcc ccaccgtacg tctatgctgt ggggagaggc tctgaggcca tggctgcagg
 480
 gctctgtgct ggtcagtgc tttctgaaggt caatggcagc aacgtgatga acgatggtgc
 540
 ccctgaggtc ctggagcact tccaggcatt ccggagtcgg cggaagagg ccctgggcct
 600
 gtaccagtgg atctaccaca cccatgagga tgcccaggaa gcacgagcca gtcaggaggc
 660
 ctccactgag gaccccagtg gcgagcaggc ccaggaggaa gaccaggctg attcagcctt
 720
 cccactgctg tccctgggtc cccggctgag cctgtgtgag ggcagcccca tggtcaccct
 780
 gactgtggac aacgtgcacc tggaacacgg cgtggtgtat gagtatgtga gcacggcagg
 840

cgtcagggtgc catgtgctgg agaagatcgt ggagccccgc ggctgcttcg gcctcaccgc
900
caagatcctc gaggcctttg ctgccaatga cagcgtcttc gtggagaact gcaggcggct
960
catggccctg agcagcgcca tcgtgaccat gccccacttt gagttccgca acatctgtga
1020
caccaagctg gagagcattg gccagaggat tgcttctac caggagtttg cagcccaact
1080
gaagagcagg gtcagcccac ccttcaaaca agccccctg gagccccacc cgctgtgtgg
1140
cctacttctg cccaccaat tgccacatca acctcatgga agtgtcctac cccaagacca
1200
ccccctcagt gggcaggtec ttcagcatcc gctttggacg caaacctcc ctcatcggcc
1260
ttgaccgga gcaaggccac ctgaaccca tgctgtacac ccagcactgc atcaccacca
1320
tggtgctcc ctctggaag tgcttgctg ctgcagagg tgatcccaa ggccagggtc
1380
tccatgatgg cagcttcggg ccagccagt ggacccttg tcaggaagac cggggcctca
1440
gcttctact caagcaggag gaccgtgaga tccaggatgc ctacctgcag ctcttcacca
1500
agctggatgt ggccctgaag gagatgaagc aatatgtcac ccagatcaac aggctgctgt
1560
ccaccatcac agagccacc tcgggtgggt cctgcgacgc atccttggtc gaggaggcct
1620
cctccctgcc cct
1633

<210> 1076

<211> 87

<212> PRT

<213> Homo sapiens

<400> 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1				5				10						15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
		20					25					30			
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35				40					45				
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50				55					60					
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65				70				75						80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
				85											

<210> 1077

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1077

nnacgcgtaa cgcgcctcgc gacgcgcctc cacagcatgt cgaccaagtg gacgtgcaat
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 gcaaacgagg caacatgttt ggcgcctcgc ggagcaccct caccagcga tgctttgttt
 120
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc
 180
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgtcgctcga aatcacttac
 240
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga
 300
 gtgctcccg cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc
 360
 agggcggtcc gggcgcatctt acgccgccgg gcaccaagat tgcgacgtac actcgcgcg
 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
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Trp	Thr	Cys	Asn	Ala	Asn	Glu	Ala	Thr	Cys	Leu	Arg	Leu	Ala	Gly	Ala
			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
			35				40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55				60					
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70				75					80	
Arg	Ala	Lys	Asn	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln	
			85					90				95			
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
			100					105				110			
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
		115				120						125			
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
	130					135									

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 60
 agccttgagg aatgtacccc catgctgtgg catctacaat cggcctcctg ttcttactct
 120
 gctcaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag
 180
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta
 240

tttaccccaa gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact
 300
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg
 360
 tttccctttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt
 420
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg ccgacttgac
 480
 cacagcacct tgttcttttc tgtaatctag acacttctgc acaatagagg gcccaccct
 540
 caagggcaca ggccatgggt tgctctcagg ctccctccac gcgt
 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
1				5					10					15	
Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35				40					45				
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50				55				60						
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65				70					75					80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
			85					90					95		
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
		100					105					110			
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115					120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctcctgt ggccatagag
 180
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa
 240
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta
 300
 aaaactcatc tcgacactgt gcttccaaaa ttgacctgtc ctcagtgcaa caaggaattc
 360

cccaaccaag aatccttgct gaagcatgtt accattcact ttatgatcac ttcaacgtat
420
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg
480
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600
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac
660
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc
720
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc
780
tgtagcaaag ccttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt
840
gtattcgaac ccaagacacc caactgtgga acaaatggag cttccgagca agtgcagaaa
900 agctgcagac ttgtctgacc aacagccagg agtcccacaa cagtcacgat 960
gggagcgaag aagacgttga cacctctgag cctatgtacg gctgcgacat ttgtggggca
1020
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct
1080
ggagaaagtg ccatcgtgaa aaagaaagct gagctcatta aagggaatta caagtgcagc
1140
gtgtgctctc gaaccttctt ctccgaaaat ggcctccggg aacatatgca gaccaccta
1200
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1260
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1320
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1380
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1680
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1800
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1920
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1980
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt
2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggagge
 2100
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 2160
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 2220
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 2280
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 2340
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 2460
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 2520
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 2580
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 2700
 ttaaatccaa gactattttt tattgctgaa gattcttgca aaccatgaag agatgttctc
 2760
 acagaacaga accccacagc tggataaggc ccgtatatat atatttgtaa gccttgcaat
 2820
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 2880
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 2940
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 3060
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 3077

<210> 1082

<211> 757

<212> PRT

<213> Homo sapiens

<400> 1082

Xaa	Pro	Val	Val	Glu	Val	Tyr	Ser	Cys	Ser	Tyr	Cys	Thr	Asn	Ser	Pro
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Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
		20						25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
		35					40					45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
	50					55				60					
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70				75					80	
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

85															90					95				
Gln	Thr	His	Leu	Lys	Thr	His	Leu	Asp	Thr	Val	Leu	Pro	Lys	Leu	Thr									
100				105				110																
Cys	Pro	Gln	Cys	Asn	Lys	Glu	Phe	Pro	Asn	Gln	Glu	Ser	Leu	Leu	Lys									
115				120				125																
His	Val	Thr	Ile	His	Phe	Met	Ile	Thr	Ser	Thr	Tyr	Tyr	Ile	Cys	Glu									
130				135				140																
Ser	Cys	Asp	Lys	Gln	Phe	Thr	Ser	Val	Asp	Asp	Leu	Gln	Lys	His	Leu									
145				150				155				160												
Leu	Asp	Met	His	Thr	Phe	Val	Phe	Phe	Arg	Cys	Thr	Leu	Cys	Gln	Glu									
165				170				175																
Val	Phe	Asp	Ser	Lys	Val	Ser	Ile	Gln	Leu	His	Leu	Ala	Val	Lys	His									
180				185				190																
Ser	Asn	Glu	Lys	Lys	Val	Tyr	Arg	Cys	Thr	Ser	Cys	Asn	Trp	Asp	Phe									
195				200				205																
Arg	Asn	Glu	Thr	Asp	Leu	Gln	Leu	His	Val	Lys	His	Asn	His	Leu	Glu									
210				215				220																
Asn	Gln	Gly	Lys	Val	His	Lys	Cys	Ile	Phe	Cys	Gly	Glu	Ser	Phe	Gly									
225				230				235				240												
Thr	Glu	Val	Glu	Leu	Gln	Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr									
245				250				255																
Asn	Cys	Lys	Phe	Cys	Ser	Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu									
260				265				270																
Lys	His	Leu	Arg	Glu	Lys	His	Cys	Val	Phe	Glu	Thr	Lys	Thr	Pro	Asn									
275				280				285																
Cys	Gly	Thr	Asn	Gly	Ala	Ser	Glu	Gln	Val	Gln	Lys	Glu	Glu	Val	Glu									
290				295				300																
Leu	Gln	Thr	Leu	Leu	Thr	Asn	Ser	Gln	Glu	Ser	His	Asn	Ser	His	Asp									
305				310				315				320												
Gly	Ser	Glu	Glu	Asp	Val	Asp	Thr	Ser	Glu	Pro	Met	Tyr	Gly	Cys	Asp									
325				330				335																
Ile	Cys	Gly	Ala	Ala	Tyr	Thr	Met	Glu	Thr	Leu	Leu	Gln	Asn	His	Gln									
340				345				350																
Leu	Arg	Asp	His	Asn	Ile	Arg	Pro	Gly	Glu	Ser	Ala	Ile	Val	Lys	Lys									
355				360				365																
Lys	Ala	Glu	Leu	Ile	Lys	Gly	Asn	Tyr	Lys	Cys	Ser	Val	Cys	Ser	Arg									
370				375				380																
Thr	Phe	Phe	Ser	Glu	Asn	Gly	Leu	Arg	Glu	His	Met	Gln	Thr	His	Leu									
385				390				395				400												
Gly	Pro	Val	Lys	His	Tyr	Met	Cys	Pro	Ile	Cys	Gly	Glu	Arg	Phe	Pro									
405				410				415																
Ser	Leu	Leu	Thr	Leu	Thr	Glu	His	Lys	Val	Thr	His	Ser	Lys	Ser	Leu									
420				425				430																
Asp	Thr	Gly	Asn	Cys	Arg	Ile	Cys	Lys	Met	Pro	Leu	Gln	Ser	Glu	Glu									
435				440				445																
Glu	Phe	Leu	Glu	His	Cys	Gln	Met	His	Pro	Asp	Leu	Arg	Asn	Ser	Leu									
450				455				460																
Thr	Gly	Phe	Arg	Cys	Val	Val	Cys	Met	Gln	Thr	Val	Thr	Ser	Thr	Leu									
465				470				475				480												
Glu	Leu	Lys	Ile	His	Gly	Thr	Phe	His	Met	Gln	Lys	Thr	Gly	Asn	Gly									
485				490				495																
Ser	Ala	Val	Gln	Thr	Thr	Gly	Arg	Gly	Gln	His	Val	Gln	Lys	Leu	Tyr									
500				505				510																
Lys	Cys	Ala	Ser	Cys	Leu	Lys	Glu	Phe	Arg	Ser	Lys	Gln	Asp	Leu	Val									

515	520	525
Lys Leu Asp Ile Asn Gly Leu Pro Tyr Gly Leu Cys Ala Gly Cys Val		
530	535	540
Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr		
545	550	555
Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu		
565	570	575
Arg Gln Gly Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys		
580	585	590
Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg		
595	600	605
Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val		
610	615	620
Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr		
625	630	635
Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile		
645	650	655
Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu		
660	665	670
Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys		
675	680	685
His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys		
690	695	700
Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His		
705	710	715
Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln		
725	730	735
Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met		
740	745	750
Thr Gln His Ser Ser		
755		

<210> 1083

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1083

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120
ccactgaccc cggttctgtc ggccaattgg gatgaagagc gcagttggaa gctgcttaac
180
tacgagcgac agggcggata caccggcctt cgtaaggctt tgacgatgcc gcctgacgac
240
gttggtctgc tggtaagga cgtaacctg cgtggccgtg gtggcgccgg gttccccacc
300
ggcatgaagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac
360
ggcgacgagt ctgagccggg cacgtgcaag gacatgccgc tcatgatggc ctccccgcac
420
accctcgtcg agggcgctcat cattgcctcc tacgcatca aggccaaagat ggccttcac
480

tacatccgcg gtgaggtgct gcacgtcgtc cgacgc
516

<210> 1084

<211> 142

<212> PRT

<213> Homo sapiens

<400> 1084

Ala	Arg	Gly	Arg	Gly	Glu	Glu	Val	Thr	Asp	Pro	Leu	Thr	Pro	Val	Leu
1				5					10					15	
Ser	Ala	Asn	Trp	Asp	Glu	Glu	Arg	Ser	Trp	Lys	Leu	Leu	Asn	Tyr	Glu
		20						25					30		
Arg	Gln	Gly	Gly	Tyr	Thr	Gly	Leu	Arg	Lys	Ala	Leu	Thr	Met	Pro	Pro
		35					40					45			
Asp	Asp	Val	Val	Ser	Leu	Val	Lys	Asp	Ala	Asn	Leu	Arg	Gly	Arg	Gly
	50					55					60				
Gly	Ala	Gly	Phe	Pro	Thr	Gly	Met	Lys	Trp	Ser	Phe	Val	Pro	Lys	Asp
65				70					75					80	
Asn	Pro	Asn	Pro	Thr	Tyr	Leu	Val	Val	Asn	Gly	Asp	Glu	Ser	Glu	Pro
			85					90				95			
Gly	Thr	Cys	Lys	Asp	Met	Pro	Leu	Met	Met	Ala	Ser	Pro	His	Thr	Leu
		100					105					110			
Val	Glu	Gly	Val	Ile	Ile	Ala	Ser	Tyr	Ala	Ile	Lys	Ala	Lys	Met	Ala
	115					120					125				
Phe	Ile	Tyr	Ile	Arg	Gly	Glu	Val	Leu	His	Val	Val	Arg	Arg		
	130					135					140				

<210> 1085

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1085

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aaatcgtaga gtgtctctga gctgcctagg gggctgtttg cgatcttgcg gacagtgtct
120
atatccacaa ggttcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct
180
ttgctgcgtt cgtagtcttg gtgcaggctg aagctgtagt cgcttttgta gatgtcccg
240
tagaagaact cgggcagggt gcctttcatg gcttccagga tgacggggtt gctcatcccg
300
tgcccgtca gaacacccgg gtacaccagg gaagagcgga tcatgtcgtc ctcaaggtag
360
ggggcggcga attc
374

<210> 1086

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1086

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Met Ile Arg Ser Ser Leu Val Tyr Pro Gly Val Leu Ser Gly His Gly
 1           5           10           15
Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
          20           25           30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
          35           40           45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
          50           55           60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
65           70           75           80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
          85           90           95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
          100           105           110

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<210> 1087

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1087

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ggcatccacc cgcacgacct cggccaggte ctgcacgacc acggcgtgag catccgggtg
120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccgtgca
180
tcgttctact tctacaacac tttcccggaa gtggatgcgt tagcgtcggc ggtgcggggc
240
gcccgggaat ttttcggagt gcattaggat tggtctgaac gtgaaccttg aatccatgta
300
ccaggaagtc atcctggacc actacaagaa tcccacgcac gcaggggtga aggctccctt
360
tgatgccgaa gtgcaccatg tgaacccttc ctgcggtgac ganaccgtct ccgggtgaag
420
ctt
423

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<210> 1088

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
 1           5           10           15
Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
          20           25           30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
          35           40           45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
          50           55           60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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65 70
Ala Arg Glu Phe Phe Gly Val His
 85

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<210> 1089
<211> 750
<212> DNA
<213> Homo sapiens
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<400> 1089
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caggagatgg cctgtgagga taaaaccaag ggagggagag taggacagag gcagtacata
120
agagtggtaa gaatggggct cggggaagaa gccttacccc ttttcttctt taatttggcg
180
aaaggacttt tggggccaagg tcaccctagc cttctcttgg gggcctcaat tttccttcatt
240
tctgtaaaaa atgggggggt aattcagaag taccctcctt attgtcaggg ttttggggaa
300
gggagtaaaa agaaattggc ttgggaaaat acttaatata gggcctgggc atgtaacaaa
360
tattcacaaa atgctagcag ttatcaccac agtgggagcc acagggagct ctgaggataa
420
gcaggggatgt cgaggggatgg gacagaactt gattgaaggc agacagacct ccaaattctt
480
gactcagaca gaatgatcac tgatccagcg agacgtcagg atcgagagga gtgtagcaag
540
gagtcaggag ggtgggcctg cgccagtgtc gccccgactc tggttcagtaa catgaaggca
600
aacacagaag ggcattgtgcg gagacacacg tgatcacgct agtgatgcag aggcagaccc
660
agacaaaaga ccgagacagg agctaggcag acacacagac agagacagcc ccgcggagtc
720
atgtagacag ggataatgac aggaacgcgt
750
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<210> 1090
<211> 103
<212> PRT
<213> Homo sapiens
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<400> 1090
Met Val Thr Trp Val Glu Leu Lys Gly Arg Leu Thr Gln Glu Met Ala
 1              5              10              15
Cys Glu Asp Lys Thr Lys Gly Gly Arg Val Gly Gln Arg Gln Tyr Ile
      20              25              30
Arg Val Val Arg Met Gly Leu Gly Glu Glu Ala Leu Pro Leu Phe Phe
      35              40              45
Phe Asn Leu Ala Lys Gly Leu Leu Gly Gln Gly His Pro Ser Leu Leu
      50              55              60
Leu Gly Ala Ser Ile Phe Leu His Ser Val Lys Asn Gly Gly Val Ile
65              70              75              80
Gln Lys Tyr Pro Pro Tyr Cys Gln Gly Phe Gly Glu Gly Ser Lys Lys

```


85
Lys Leu Ala Trp Glu Asn Thr
100

90

95

<210> 1091
<211> 438
<212> DNA
<213> Homo sapiens

<400> 1091
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gcgattatta cggcttatat gaacgaagtg tatttggtc aagtaggtaa tgaggggctt
120
catggctttg ccgaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc
180
gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga
240
caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat
300
cgtttaaccg agtcggatta taatatTTTA cggaaacaac ccattcgctt ggcagataaa
360
caccaagaac gctcagtata tggggattat ttagatctag tctctatgca gttatcgca
420
gactttgatc gctgcatg
438

<210> 1092
<211> 146
<212> PRT
<213> Homo sapiens

<400> 1092
Thr Arg Lys Leu Thr Glu Val Val Met Ser Leu Leu Leu Glu Tyr His
1 5 10 15
Tyr Ser Lys Ser Ala Ile Ile Thr Ala Tyr Met Asn Glu Val Tyr Leu
20 25 30
Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln
35 40 45
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg
65 70 75 80
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu
85 90 95
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys
100 105 110
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly
115 120 125
Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg
130 135 140
Cys Met
145

<210> 1093

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1093

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ggtcagctgc tgaacgacga gcagtacttc gaagcgctgg aagagttcgg cgacgatttc
120
gatgcccga tgggtgccga agctgtccgt gaactgctgc acgctatcga cctggaacac
180
gagattggcc gtctgcgtga acaaattccg caaaccaact ccgaaaccaa gatcaagaag
240
ctgtccaagc gtctgaagtt gatggaagcc ttccagggtt ccggcaactt gccagagtgg
300
atggtgctga ccgttctgcc ggttctgccg ccagatctgc gtccgctggt a
351

<210> 1094

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1094

Arg	Val	Leu	Tyr	Phe	Glu	Ser	Tyr	Val	Val	Ile	Asp	Pro	Gly	Met	Thr
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Thr	Leu	Glu	Lys	Gly	Gln	Leu	Leu	Asn	Asp	Glu	Gln	Tyr	Phe	Glu	Ala
			20					25					30		
Leu	Glu	Glu	Phe	Gly	Asp	Asp	Phe	Asp	Ala	Arg	Met	Gly	Ala	Glu	Ala
		35					40					45			
Val	Arg	Glu	Leu	Leu	His	Ala	Ile	Asp	Leu	Glu	His	Glu	Ile	Gly	Arg
	50					55					60				
Leu	Arg	Glu	Gln	Ile	Pro	Gln	Thr	Asn	Ser	Glu	Thr	Lys	Ile	Lys	Lys
65					70					75				80	
Leu	Ser	Lys	Arg	Leu	Lys	Leu	Met	Glu	Ala	Phe	Gln	Gly	Ser	Gly	Asn
			85						90					95	
Leu	Pro	Glu	Trp	Met	Val	Leu	Thr	Val	Leu	Pro	Val	Leu	Pro	Pro	Asp
			100					105						110	
Leu	Arg	Pro	Leu	Val											
			115												

<210> 1095

<211> 619

<212> DNA

<213> Homo sapiens

<400> 1095

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120
agccagcggc agatccgcgg ggagatcgac agcctgcgcc aggagaagga ctactgctc
180

aagcagcgcc tggagatcga cggcaagctg aggcagggga gtctgctgtc ccccgaggag
 240
 gagcggacgc tgttccagtt ggatgaggcc atcgaggccc tggatgctgc cattgagtat
 300
 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc
 360
 cagtgcgaga tgaacctcat ggccaagctc agctacctct catcctcaga gaccagagcc
 420
 ctctcttgca agtattttga caaggtgggc cagcagccca tggccccccc agctcctcct
 480
 cacggcacgt gtggggaggt gtctcatggc agctgctcca gcggatatcc cgtttcctcc
 540
 cagactgggg gacagaatca ggaccaactc atctgcaggg ccgcctgacc ttaaagccta
 600
 ttttacttgt gaacctaag
 619

<210> 1096

<211> 195

<212> PRT

<213> Homo sapiens

<400> 1096

Xaa	Arg	Val	Arg	Ser	Ser	Gln	Ala	Leu	Asn	Glu	Asp	Ile	Val	Arg	Val
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Ser	Ser	Arg	Leu	Glu	His	Leu	Glu	Lys	Glu	Leu	Ser	Glu	Lys	Ser	Gly
			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
			35				40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50					55				60					
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
65					70					75				80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
			85					90					95		
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
			100				105						110		
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
			115				120					125			
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
			130				135					140			
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150					155				160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
			165						170					175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
			180					185					190		
Arg	Ala	Ala													
			195												

<210> 1097

<211> 5108

<212> DNA

<213> Homo sapiens

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120
gacaaagagt tcacttccca tgagatcaaa caccctcaca gttcctgtgc tttcggcata
180
ggccagtagg gtacaatcgt aactccatgc taccctcttc cactgggggtt tcgggtcttt
240
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300
acactgatct tgaacagcag ccaaaagctt tccattgctt gcaagtacca aatgccagtt
360
tatctgttta ttaaccaagc gaaccagtcc atcagggagc aaaaaaggtg ccgggctgta
420
ccagatgtat tggcgtaaaa ataataaacg atctcgaatt gctttcgtga tgataaagga
480
tgcaccatgt ttttggttgc ctctaggtct tacttcagtc tccggtggcc actcgggtgt
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600
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660
accaaaaaca tgggtgcatcc tttatcatca cgaaagcaat tcgagatcgt ttattatttt
720
tacgccata catctggtac agcccggcac cttttttgct ccctgatgga ctggttcgct
780
tggttaataa acagataaac tggcatttgg tacttgcaag caatagcact agagtgcac
840
tatacctgtg aacgaaatga tcaactctgt ctttgctatg acctactaga atgtctgcca
900
gaaagaggat atggtgataa gacagaggca accacaaagc ttcattgacat ggtagaccaa
960
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1020
tcatttggtta aaaacactca atctagctca gaagaggcac gcaagctgat ggtagattg
1080
acgaggcaca ctggccggaa gcagcctcct gtcagtgagt ctcatggag aacgttgctg
1140
caagacatgt taactatgca gcagaatgta tacacatgtc tagattctga tgcctgctat
1200
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1260
cagatgatgc actgcagtgc ttgttcagaa aatcctccag ctggtatagc ccataaaggg
1320
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1380
gagtacttca attcttctac caacctcact gatagctgca tggatctagc caggtgctgc
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1500
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1560

gatcggatca gtctcatcaa ggagtgtatt tcccagtcce ccacatgcta taaacaatcc
1620
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1680
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1920
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1980
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2100
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2160
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2220
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2280
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2340
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2400
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2460
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2520
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2580
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2640
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<210> 1098

<211> 1336

<212> PRT

<213> Homo sapiens

<400> 1098

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			20					25					30		
Ser	Ser	Glu	Glu	Ala	Arg	Lys	Leu	Met	Val	Arg	Leu	Thr	Arg	His	Thr
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Gly	Arg	Lys	Gln	Pro	Pro	Val	Ser	Glu	Ser	His	Trp	Arg	Thr	Leu	Leu
			50				55					60			
Gln	Asp	Met	Leu	Thr	Met	Gln	Gln	Asn	Val	Tyr	Thr	Cys	Leu	Asp	Ser
65						70				75					80
Asp	Ala	Cys	Tyr	Glu	Ile	Phe	Thr	Glu	Ser	Leu	Leu	Cys	Ser	Ser	Arg
						85				90					95
Leu	Glu	Asn	Ile	His	Leu	Ala	Gly	Gln	Met	Met	His	Cys	Ser	Ala	Cys
						100				105				110	
Ser	Glu	Asn	Pro	Pro	Ala	Gly	Ile	Ala	His	Lys	Gly	Lys	Pro	His	Tyr
						115				120				125	
Arg	Val	Ser	Tyr	Glu	Lys	Ser	Ile	Asp	Leu	Val	Leu	Ala	Ala	Ser	Arg
						130				135				140	
Glu	Tyr	Phe	Asn	Ser	Ser	Thr	Asn	Leu	Thr	Asp	Ser	Cys	Met	Asp	Leu
145						150				155					160
Ala	Arg	Cys	Cys	Leu	Gln	Leu	Ile	Thr	Asp	Arg	Pro	Pro	Ala	Ile	Gln
						165				170					175
Glu	Glu	Leu	Asp	Leu	Ile	Gln	Ala	Val	Gly	Cys	Leu	Glu	Glu	Phe	Gly
						180				185				190	
Val	Lys	Ile	Leu	Pro	Leu	Gln	Val	Arg	Leu	Cys	Pro	Asp	Arg	Ile	Ser
						195				200				205	
Leu	Ile	Lys	Glu	Cys	Ile	Ser	Gln	Ser	Pro	Thr	Cys	Tyr	Lys	Gln	Ser
						210				215				220	
Thr	Lys	Leu	Leu	Gly	Leu	Ala	Glu	Leu	Leu	Arg	Val	Ala	Gly	Glu	Asn
225						230				235					240
Pro	Glu	Glu	Arg	Arg	Gly	Gln	Val	Leu	Ile	Leu	Leu	Val	Glu	Gln	Ala
						245				250					255
Leu	Arg	Phe	His	Asp	Tyr	Lys	Ala	Ala	Ser	Met	His	Cys	Gln	Glu	Leu
						260				265				270	
Met	Ala	Thr	Gly	Tyr	Pro	Lys	Ser	Trp	Asp	Val	Cys	Ser	Gln	Leu	Gly

275	280	285
Gln Ser Glu Gly Tyr Gln Asp Leu Ala Thr Arg Gln Glu Leu Met Ala		
290	295	300
Phe Ala Leu Thr His Cys Pro Pro Ser Ser Ile Glu Leu Leu Leu Ala		
305	310	315
Ala Ser Ser Ser Leu Gln Thr Glu Ile Leu Tyr Gln Arg Val Asn Phe		
325	330	335
Gln Ile His His Glu Gly Gly Glu Asn Ile Ser Ala Ser Pro Leu Thr		
340	345	350
Ser Lys Ala Val Gln Glu Asp Glu Val Gly Val Pro Gly Ser Asn Ser		
355	360	365
Ala Asp Leu Leu Arg Trp Thr Thr Ala Thr Thr Met Lys Val Leu Ser		
370	375	380
Asn Thr Thr Thr Thr Thr Lys Ala Val Leu Gln Ala Val Ser Asp Gly		
385	390	395
Gln Trp Trp Lys Lys Ser Leu Thr Tyr Leu Arg Pro Leu Gln Gly Gln		
405	410	415
Lys Cys Gly Gly Ala Tyr Gln Ile Gly Thr Thr Ala Asn Glu Asp Leu		
420	425	430
Glu Lys Gln Gly Cys His Pro Phe Tyr Glu Ser Val Ile Ser Asn Pro		
435	440	445
Phe Val Ala Glu Ser Glu Gly Thr Tyr Asp Thr Tyr Gln His Val Pro		
450	455	460
Val Glu Ser Phe Ala Glu Val Leu Leu Arg Thr Gly Lys Leu Ala Glu		
465	470	475
Ala Lys Asn Lys Gly Glu Val Phe Pro Thr Thr Glu Val Leu Leu Gln		
485	490	495
Leu Ala Ser Glu Ala Leu Pro Asn Asp Met Thr Leu Ala Leu Ala Tyr		
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Leu Leu Ala Leu Pro Gln Val Leu Asp Ala Asn Arg Cys Phe Glu Lys		
515	520	525
Gln Ser Pro Ser Ala Leu Ser Leu Gln Leu Ala Ala Tyr Tyr Tyr Ser		
530	535	540
Leu Gln Ile Tyr Ala Arg Leu Ala Pro Cys Phe Arg Asp Lys Cys His		
545	550	555
Pro Leu Tyr Arg Ala Asp Pro Lys Glu Leu Ile Lys Met Val Thr Arg		
565	570	575
His Val Thr Arg His Glu His Glu Ala Trp Pro Glu Asp Leu Ile Ser		
580	585	590
Leu Thr Lys Gln Leu His Cys Tyr Asn Glu Arg Leu Leu Asp Phe Thr		
595	600	605
Gln Ala Gln Ile Leu Gln Gly Leu Arg Lys Gly Val Asp Val Gln Arg		
610	615	620
Phe Thr Ala Asp Asp Gln Tyr Lys Arg Glu Thr Ile Leu Gly Leu Ala		
625	630	635
Glu Thr Leu Glu Glu Ser Val Tyr Ser Ile Ala Ile Ser Leu Ala Gln		
645	650	655
Arg Tyr Ser Val Ser Arg Trp Glu Val Phe Met Thr His Leu Glu Phe		
660	665	670
Pro Phe Thr Asp Ser Gly Leu Ser Thr Leu Glu Ile Glu Asn Arg Ala		
675	680	685
Gln Asp Leu His Leu Phe Glu Thr Leu Lys Thr Asp Pro Glu Ala Phe		
690	695	700
His Gln His Met Val Lys Tyr Ile Tyr Pro Thr Ile Gly Gly Phe Asp		

705		710		715		720
His Glu Arg Leu Gln Tyr Tyr Phe Thr Leu Leu Glu Asn Cys Gly Cys						
	725		730		735	
Ala Asp Leu Gly Asn Cys Ala Ile Lys Pro Glu Thr His Ile Arg Leu						
	740		745		750	
Leu Lys Lys Phe Lys Val Val Ala Ser Gly Leu Asn Tyr Lys Lys Leu						
	755		760		765	
Thr Asp Glu Asn Met Ser Pro Leu Glu Ala Leu Glu Pro Val Leu Ser						
	770		775		780	
Ser Gln Asn Ile Leu Ser Ile Ser Lys Leu Val Pro Lys Ile Pro Glu						
785		790		795		800
Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu						
	805		810		815	
Gln Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val Pro						
	820		825		830	
Gly Ser Ser Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr						
	835		840		845	
Phe Asp Arg Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val						
	850		855		860	
Thr Phe Ser Pro Lys Ala Val Thr Lys Leu Ser Val Glu Ala Arg Lys						
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Glu Met Thr Arg Lys Ala Ile Lys Thr Val Lys His Phe Ile Glu Lys						
	885		890		895	
Pro Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser						
	900		905		910	
Lys Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala						
	915		920		925	
His Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser						
	930		935		940	
Glu Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg						
945		950		955		960
Ser Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp						
	965		970		975	
Gly Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly						
	980		985		990	
Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys						
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Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg						
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Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Thr Ser						
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Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp						
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Leu Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile						
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His Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp						
	1075		1080		1085	
Ser Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser						
	1090		1095		1100	
Trp Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn						
1105		1110		1115		1120
Arg Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala						
	1125		1130		1135	
Glu Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp Pro Pro Met Lys						

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Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val
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      1170      1175      1180
Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro
1185      1190      1195      1200
Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu
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Leu Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu
      1220      1225      1230
His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp
      1235      1240      1245
Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu
      1250      1255      1260
Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His
1265      1270      1275      1280
Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly
      1285      1290      1295
Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu
      1300      1305      1310
Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala
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Leu Arg Ala Ala Gln His Trp Val
      1330      1335

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<210> 1099

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1099

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<210> 1100

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1100

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Arg Arg Leu Ile Ala Arg Asn Ile Ala Met Asp Lys Leu Arg Phe Trp

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 Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
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 Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
 50 55 60
 Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
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 Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
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<210> 1101

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1101

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<210> 1102

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1102

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 20 25 30
 His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
 35 40 45
 Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
 50 55 60
 Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
 65 70 75 80
 Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

				85					90					95					
Ala	Tyr	Arg	Arg	His	Lys	Leu	Gly	Ser	Glu	Ala	Ser	Arg	Arg	Phe	Glu				
			100					105					110						
Arg	Gly	Val	Asp	Pro	Ile	Cys	Ala	His	Thr	Ala	Ala	Val	Arg	Ala	Ala				
		115					120					125							
Glu	Leu	Leu	Ala	Gln	Tyr	Gly	Gly	Ala	Thr	Val	Gly	Glu	Pro	Thr	Val				
	130					135					140								
Val	Gly	Glu	Val	Pro	Glu	Met	Pro	Arg	Gln	Thr	Ile	Asn	Ala	Asp	Leu				
145					150				155					160					
Pro	Asn	Arg	Ile	Leu	Gly	Thr	Lys	Val	Pro	Thr	Glu	Glu	Val	Ile	Glu				
				165				170						175					
Ile	Leu	Thr	Arg																
			180																

<210> 1103

<211> 537

<212> DNA

<213> Homo sapiens

<400> 1103

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 120
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 180
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 300
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 360
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 420
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<210> 1104

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1104

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Arg	Phe	Gly	Ala	Met	Gly	Ser	Gly	Ala	Ala	Met	Gly	Phe	Phe	Leu	Cys				
			20					25					30						
Ser	Pro	Leu	Tyr	Trp	Val	Gly	Ser	Gly	Gly	Glu	Thr	His	Ala	Asp	Lys				
		35				40						45							
Gly	Arg	Ser	Gly	Cys	Arg	Arg	Ala	Gly	Ile	His	Arg	Asn	Ser	Pro	Tyr				
	50				55						60								
Cys	Gly	Tyr	Val	His	Gln	Cys	Gly	Gly	Gly	Arg	Arg	Gln	Ala	Gly	Met				

65		70		75		80									
Gly	Ala	Ala	Glu	Gly	Val	Pro	Gly	Leu	Gly	Gly	Tyr	Leu	Arg	Glu	Gly
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Phe	Val	Cys	Ser	Gly	Glu	Leu	Gly	Glu	Ala	Ala	Gly	Pro	Ala	Ala	Ala
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<210> 1105
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 1105
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<210> 1106
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1106
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 35 40 45
 Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
 50 55 60
 Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
 65 70 75 80
 Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
 85 90 95
 Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
 100 105 110
 Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
 115 120 125
 Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
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 Ser Gly His Asn Ala

145

<210> 1107

<211> 618

<212> DNA

<213> Homo sapiens

<400> 1107

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<210> 1108

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1108

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35 40 45Asp Ala Leu Arg His Ala Gln Lys Met Glu Ala Gly Gly Gln Leu Thr
50 55 60Gly Gly Ile Ala His Asp Phe Asn Asn Met Leu Thr Gly Ile Ile Gly
65 70 75 80Ser Leu Asp Leu Met Gln Arg Tyr Ile Xaa Ala Gly Arg Ser Asp Glu
85 90 95Ile Gly Arg Leu Thr Asp Ala Ala Val Ser Ser Ala His Arg Ala Ala
100 105 110Ala Leu Thr His Arg Leu Leu Ala Phe Ser Arg Arg Gln Ser Leu Ala
115 120 125

Pro Arg Pro Leu Asp Pro Asn Gln Leu Val Ala Ser Leu Glu Asp Leu

130		135		140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly				
145		150		155
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala				160
	165		170	175
Leu Leu Asn Leu Ala Ile				
180				

<210> 1109
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 1109
 accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc
 60
 agcctcaaga tcgtcgccacc gctggggggc atcctcgtgc ccctggatca ggtgcccgat
 120
 cccgttttcg cccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa
 180
 ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg
 240
 atcacgaccc cggaaggcat cgaggttctg gtccatatcg gactggatac cgtgatgctg
 300
 cgcggcgaca gctatccccc ccccn
 325

<210> 1110
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1110
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser
1 5 10 15
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu
20 25 30
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val
35 40 45
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro
50 55 60
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr
65 70 75 80
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp
85 90 95
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro
100 105

<210> 1111
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1111

nnacgcgtcg ccccggtgcg cctggcagtg ggagaagagc atgaccttac cgagctcgcg
 60
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaaacgccg tggcgaattc
 120
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccggtgc tagaacacccc ggtccgtatc
 180
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc
 240
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac
 300
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg
 360
 gagcggatcg gcaacggtca agctt
 385

<210> 1112

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1112

Xaa	Arg	Val	Ala	Pro	Val	Arg	Leu	Ala	Val	Gly	Glu	Glu	His	Asp	Leu
1				5					10					15	
Thr	Glu	Leu	Ala	Thr	Glu	Leu	Val	Asn	Ala	Ala	Tyr	Ser	Arg	Val	Asp
			20					25					30		
Met	Val	Glu	Arg	Arg	Gly	Glu	Phe	Ala	Val	Arg	Gly	Gly	Ile	Val	Asp
		35					40					45			
Val	Phe	Pro	Pro	Val	Leu	Glu	His	Pro	Val	Arg	Ile	Asp	Phe	Phe	Gly
	50					55					60				
Asp	Glu	Ile	Glu	Glu	Met	Thr	Ser	Phe	Ala	Val	Ala	Asp	Gln	Arg	Ser
65					70					75				80	
Thr	Asp	Glu	Thr	His	Gln	Glu	Leu	Ile	Cys	Ala	Pro	Cys	Arg	Glu	Leu
				85					90					95	
Ile	Leu	Thr	Asp	Glu	Val	Arg	Ser	Arg	Ala	Lys	Ala	Leu	Leu	Thr	Asp
		100					105					110			
His	Pro	Glu	Leu	Ala	Asp	Met	Leu	Glu	Arg	Ile	Gly	Asn	Gly	Gln	Ala
		115					120					125			

<210> 1113

<211> 400

<212> DNA

<213> Homo sapiens

<400> 1113

nnncgaccga tgagcgatcg cgaacccgctc aacctgggat acccctacgt cgagtctttc
 60
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac
 120
 gagcacacca tcgaggagat gcatcagatc gctcgcggtt accccgactc ccgttcggcg
 180
 ttgctgccga tcctgcacct ggttcagtcg gtggacggac gcatctcgcc ggtcgggtatt
 240
 gagactgcgg ctgaagtgct cggcattacc accgcccagg tatccgggggt ggcgaccttc
 300

tacaccatgt ataagaagca ccctgcgggc cagcatcaca tcggtgtctg caccacggcg
360
ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtg
400

<210> 1114
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1114
Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr
1 5 10 15
Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln
20 25 30
Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His
35 40 45
Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile
50 55 60
Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile
65 70 75 80
Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly
85 90 95
Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His
100 105 110
His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu
115 120 125
Glu Val Leu Ala Arg
130

<210> 1115
<211> 402
<212> DNA
<213> Homo sapiens

<400> 1115
tctccgactg cacagattag agaaaggact gcgatgacca ttcgcaccac tcatgttggt
60
tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc
120
ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcgttgt gaagcgtcag
180
gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg
240
gttgattacg gcgcgtggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag
300
gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg
360
tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt
402

<210> 1116
<211> 134
<212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
 20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
 35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
 50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
 65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
 85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
 100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
 115          120          125
Gln Arg Phe Arg Thr Arg
 130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggc ttgccctggc tggaagtggc atgcagacct tggcgcgga cccgctggct
 60
gaccctacc tgctaggtgt atcggctggc gcaagtgtgg gagcaaccgc agtcacgct
 120
ttggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct ttagggggcc
 180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
 240
cggttggtgc tgtcgggcgt ggtgtgtgcc tcggcggtct cgcgttggcg agtttcctcg
 300
tctttcg
 307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
 20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
 35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119
 <211> 353
 <212> DNA
 <213> Homo sapiens

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<400> 1119
cgcgctccttg agatgcttga gcaggctcgg attgaggatc cagccagggt gatggattcc
60
tatccgcata aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttgacgt cacggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attaccacg atttggcggg tgtctcgac atctgccggg agcttatcgt gatgacgtcg
300
ggcaaggctg ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1      5      10      15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
20      25      30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
35      40      45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50      55      60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65      70      75      80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
85      90      95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
100      105      110
Leu Ser His Pro Asp
115

```

<210> 1121
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg
 60
 cccagggcac ggtgttcate cgcaccttga cgatgatgaa aggcgtcgcc gcgaatctca
 120
 ccgcagcggg cgttcccggg gtgagctatg cacacgcccc cgagagcacg cgcgcgatgc
 180
 atgccgcggg cgttccgggc ctggccggca cgcacgccta catcgggtcc ttcacacggg
 240
 catcgcgcgc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac
 300
 gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgcgc
 360
 gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc
 406

<210> 1122

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10					15	
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
			20					25					30		
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35					40					45			
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50				55						60				
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65					70					75				80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
		100					105						110		
Ala	Thr	Ser	Thr	Gly											
			115												

<210> 1123

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1123

gccggcgatg cgttcattaa ggcctaagat gcgccgacgc ctccccgctt tcctcgccct
 60
 cgcctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc
 120
 aagcgaatgc tcccctgttg atattgccgc agtgcgcgag gccctgccgc attcgctcgc
 180
 taaggcgaag ctcgacccgc actccaccaa cgaggatgaa cactcctttt ccatgctcta
 240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacgggtgc
 300
 acccgtctgc cccgatgacc ccaatgaggc agcgcgc
 337

<210> 1124
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1124
 Met Arg Ser Leu Arg Pro Lys Met Arg Arg Arg Leu Pro Ala Phe Leu
 1 5 10 15
 Ala Leu Ala Ser Thr Ala Leu Ala Ala Ala Gly Met Val Gly Cys Ser
 20 25 30
 Ser Glu Gly Ala Ser Pro Ser Glu Cys Ser Pro Val Asp Ile Ala Ala
 35 40 45
 Val Arg Glu Ala Leu Pro His Ser Leu Ala Lys Ala Lys Leu Asp Pro
 50 55 60
 His Ser Thr Asn Glu Asp Glu His Ser Phe Ser Met Leu Tyr Arg Ala
 65 70 75 80
 Gln Asp Lys Glu Gln Val Ser Leu Leu Gly Thr Lys Tyr Glu Ala Asp
 85 90 95
 Gly Ala Pro Val Cys Pro Asp Asp Pro Asn Glu Ala Ala Arg
 100 105 110

<210> 1125
 <211> 555
 <212> DNA
 <213> Homo sapiens

<400> 1125
 nnccttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc
 60
 gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg
 120
 gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat
 180
 tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc
 240
 aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca
 300
 gtcggtaaaa aagtagaggc ggcaaaagcg agcgccggtt ctgcgaaatc gagcatttcg
 360
 gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga
 420
 ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc
 480
 aagcaaatac aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa
 540
 cctgctgcca agctt
 555

<210> 1126

<211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1126
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly
 1 5 10 15
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val
 20 25 30
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val
 35 40 45
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys
 50 55 60
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile
 65 70 75 80
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn
 85 90 95
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr
 100 105 110
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr
 115 120 125
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala
 130 135 140
 Lys Leu
 145

<210> 1127
 <211> 352
 <212> DNA
 <213> Homo sapiens

<400> 1127
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc
 60
 cgcggggtccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa
 120
 tcactcgctt cggaagtggg cgtaccgagg ttcaccgacc tgggtgaaggc gatcgagtcg
 180
 accgctccgg acgcccgggt catcgccacg ccggactcgg ctcaccgcca accggctgag
 240
 accgccatcg acgcccgcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat
 300
 gacgccgaag cgatcgtgct ccgcgctgaa cgggcccggcg tccgtctcat ga
 352

<210> 1128
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1128
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His
 1 5 10 15
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
100      105      110
Gly Val Arg Leu Met
      115

```

<210> 1129

<211> 336

<212> DNA

<213> Homo sapiens

<400> 1129

```

ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttcagga tgacgacgtc
120
ggggccgatg aggaagaggc agagttgctg ggcgaacaca cgctcacaga gaagtttgtc
180
tgcttgatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcctgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

```

<210> 1130

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1130

```

Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
100      105      110

```

<210> 1131
 <211> 672
 <212> DNA
 <213> Homo sapiens

<400> 1131
 gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc
 60
 gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccggataa cccgtatgtg
 120
 ctcggccccgc acgtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag
 180
 ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga
 240
 cgtcgcggaa atcggtgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg
 300
 cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggtcatcggg
 360
 gtagtcgacg aagccgccgc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag
 420
 ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgccct ggtgcaccag
 480
 gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag
 540
 gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcaggtgga actgacagag
 600
 caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc
 660
 ctcgagatgc cc
 672

<210> 1132
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1132
 Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu
 1 5 10 15
 Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val
 20 25 30
 Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala
 35 40 45
 Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser
 50 55 60
 Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg
 65 70 75 80
 Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp
 85 90 95
 Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp
 100 105 110
 Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp
 115 120 125
 Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		
165	170	175
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		
180	185	190
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		
195	200	205
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		
210	215	220

<210> 1133

<211> 796

<212> DNA

<213> Homo sapiens

<400> 1133

acgcgtgaag gggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct
60
tgtctccggg gacctggcgt aggtctcttc tgccttaacc cttggctttt gcacttcctc
120
tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag
180
ccggttcctg tcctaaccct actggcatct tacactctgg gagatagctt cccctgaga
240
ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt ggggtggggg
300
agtcaggtac agtatttttt cttttaagc atcattgatc acataataag gtttgtcata
360
gtccttaatc acagacctgt gaaatttggg gaattcacgg cacctaggat gggagtgagc
420
ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg
480
ctgggtgtcg gggccttcgc caggacctc ccggggactc tggacgctct ttgtctgccc
540
ttccttttcc ctcacctgc tccccgtga gaaagtggg ctcatgcagc tcagctcagt
600
gacagagggg ttattagggg tagctctggg acccatcttt tgggtgatttc ttctctctct
660
ttctctaata gaataattgt ttctgtctac acttctttat ttctctctct ctacagctgc
720
cttctaaaaa tgtgcttttc tgttcttgc gaactgaagc ttgcatggcc tttgttgtga
780
ctttcccttc acgcgt
796

<210> 1134

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1134

Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100          105          110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115          120          125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130          135          140
Gln Trp Gly
145

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<210> 1135
 <211> 376
 <212> DNA
 <213> Homo sapiens

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<400> 1135
gatcaggcca cacaggacaa ctctgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcggtctg
120
gcgacccgtc tgcctcccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttgttt atagtccctg ctgctaacca cccttgttgc
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

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<210> 1136
 <211> 67
 <212> PRT
 <213> Homo sapiens

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<400> 1136
Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Pro Ser
35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

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50 55 60
Asn Tyr Arg
65
<210> 1137
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1137
acgcgtcgct ggaacccgaa gatgaagcgc ttcattcttca ccgagcgcgaa cggatatctac
60
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag
120
actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc
180
atcgttgagc aggccactcg cgttggcatg ccctatgtca accagcgttg gcttggggga
240
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc
300
atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc
357

<210> 1138
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1138
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg
1 5 10 15
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp
20 25 30
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile
35 40 45
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln
50 55 60
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly
65 70 75 80
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys
85 90 95
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr
100 105 110
Lys Lys Glu Leu Leu Met Leu
115

<210> 1139
<211> 456
<212> DNA
<213> Homo sapiens

<400> 1139
gtgcacaggt cgtctgaggc catgccgcgg acgatcgatc cgagtatggc ggcaccttca
60

ccaatcccgt aggacccgtc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct
 120
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttggcc
 180
 agactgaggc cttggaggag cgcggccgtc ggggggacgt ggccctgcggc cgggcgttcc
 240
 ttgctctcaa ggacttcgtc gtcgcggctg acaaggaata cgtttgtgtg gtcgcctgca
 300
 atgcatgtc gagcgtggtg accatcgagg tgaaggacgg ttccggcata gaggtcatcg
 360
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct
 420
 gccgcgtctt cgctgacgtc ggccaggacc gctagc
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
			20					25					30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
		35					40				45				
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
	50					55				60					
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65					70				75					80	
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
			85					90					95		
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
		100					105						110		
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc
 60
 ggcgaccagt acaaggacgt ggtggcggtt ggccctgttg ttctggtgct gttgttccgt
 120
 ccgaccggca ttctggggccg tccggagggt gagaaagtat gagcagatat cttaaactcg
 180
 cgtttttcag cgccctgttg gtgtggggccg tggcctttcc ggtactcggc ctcaagctga
 240
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg
354

<210> 1142
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1142
Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly
1 5 10 15
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu
20 25 30
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro
35 40 45
Glu Val Glu Lys Val
50

<210> 1143
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1143
acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc
60
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg
120
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc
180
attcgaaatc ctggcccacg tggccgtcaa tgcccaacac tacgcgctct ccgagagacc
240
ggcgcctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc
300
gatecgccaag aaggccgcga accacaccat gcatcccggc aggcagtcga ttt
353

<210> 1144
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1144
Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val
1 5 10 15
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg
20 25 30
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln
35 40 45
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys
50 55 60
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys
65 70 75 80
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser

Met Arg Gln Cys Arg Gly
100

85

90

95

<210> 1145

<211> 360

<212> DNA

<213> Homo sapiens

<400> 1145

gtcttcggcg ggctcggcct gttctattgc gtcattgaccc cgggtgtactg gttctcggcc
60
catgaagtgg ccggcacctg ggtactcggg ctgtcggcgg cgatggctct gatggtgttt
120
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc
180
gaggtgatcg acggggctgg tccggtcggg ttcttcccgc cacagagtat ctggccgttc
240
tgggtgcgcgc tcgttgctgc catcatgtgc ctccggcccga tcttcggctg gtggatctct
300
ctgctcgggc tgggcattgt tatctgggcc gcctcggggtt gggcttttga gtactaccgc
360

<210> 1146

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1146

Val	Phe	Gly	Gly	Leu	Gly	Leu	Phe	Tyr	Cys	Val	Met	Thr	Pro	Val	Tyr
1				5					10					15	
Trp	Phe	Ser	Ala	His	Glu	Val	Ala	Gly	Thr	Trp	Val	Leu	Gly	Leu	Ser
			20					25					30		
Ala	Ala	Met	Ala	Leu	Met	Val	Phe	Phe	Tyr	Val	Gln	Val	Ile	Ala	Lys
		35					40					45			
Lys	Ile	Asn	Pro	Arg	Pro	Ser	Asp	Glu	Lys	Asp	Ala	Glu	Val	Ile	Asp
	50					55					60				
Gly	Ala	Gly	Pro	Val	Gly	Phe	Phe	Pro	Pro	Gln	Ser	Ile	Trp	Pro	Phe
65					70					75				80	
Trp	Cys	Ala	Leu	Val	Val	Ala	Ile	Met	Cys	Leu	Gly	Pro	Ile	Phe	Gly
				85					90					95	
Trp	Trp	Ile	Ser	Leu	Leu	Gly	Leu	Gly	Ile	Val	Ile	Trp	Ala	Ala	Ser
			100					105					110		
Gly	Trp	Ala	Phe	Glu	Tyr	Tyr	Arg								
		115					120								

<210> 1147

<211> 409

<212> DNA

<213> Homo sapiens

<400> 1147

tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa
60

gccaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt
 120
 ggatcactat gtgctctcca aattgggagg ggaagtctac tctcctctct cctctctctc
 180
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgagggt
 240
 cttttccctt catggatata ctctttctgc cctccacata aaggggcatt gatggatctt
 300
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc
 360
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn
 409

<210> 1148

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1148

Met	Gln	Ser	Gly	Leu	Leu	Lys	Val	Met	Ile	Val	Ala	Lys	Asn	Ile	Glu
1				5				10					15		
Ala	Lys	Lys	Ala	Ser	Thr	Phe	Phe	Ile	Asn	Pro	Glu	Leu	Ile	Met	Leu
			20					25					30		
Met	Pro	Val	Gly	Gly	Ser	Leu	Cys	Ala	Leu	Gln	Ile	Gly	Arg	Gly	Ser
			35				40					45			
Leu	Leu	Ser	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Ser	Pro	Leu	Ser	Ser	Leu
			50			55					60				
Leu	Ser	Ile	Pro	Arg	Ala	Val	Glu	His	Asp	Glu	Val	Leu	Phe	Pro	Ser
65				70					75					80	
Trp	Ile	Ser	Ser	Phe	Cys	Pro	Pro	His	Lys	Gly	Ala	Leu	Met	Asp	Leu
				85				90						95	
Gln	Glu	Trp	Asp	Ala	Phe	Pro									
															100

<210> 1149

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1149

gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc
 60
 cgtgaggcgg tatcgcagat cattaccttc ggtaccatgg cggcgaaagc ggttattcgt
 120
 gacgtggggc gtgtactggg tcacccttat ggcttcgtcg atcgcattct caagctgggtg
 180
 ccgcccgate cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa
 240
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg
 300
 gtgacgcgg
 309

<210> 1150

<211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1150
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala
 1 5 10 15
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr
 20 25 30
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His
 35 40 45
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro
 50 55 60
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu
 65 70 75 80
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg
 85 90 95
 Lys Leu Gly Arg Val Thr Arg
 100

<210> 1151
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1151
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgccggc ttatgtcggg
 60
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc
 120
 gggttgggtc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg
 180
 gtgaagttcc tttaacagggt tcctaactac tcgaaccctg cgggaatctc gcaatccacc
 240
 gagcgtcgcc gggagatcct agcgggtggc gacgagctgg atctgttggt ggttgaggac
 300
 aaccgtacg gggtactcaa cctcgatggg gatccactgc cgacgttgaa gtcgatggat
 360

<210> 1152
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1152
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro
 1 5 10 15
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val
 20 25 30
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg
 35 40 45
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu
 50 55 60
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr


```

65          70          75          80
Glu Arg Arg Arg Glu Ile Leu Ala Val Ala Asp Glu Leu Asp Leu Leu
          85          90          95
Val Val Glu Asp Asn Pro Tyr Gly Leu Leu Asn Leu Asp Gly Asp Pro
          100          105          110
Leu Pro Thr Leu Lys Ser Met Asp
          115          120

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<210> 1153
 <211> 416
 <212> DNA
 <213> Homo sapiens

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<400> 1153
gcgtggattc gtcctggcgg cgctcgtacc gacctgcccg agaccgggct cgaccagttg
60
cgtgacctca tcaagcggat ggaaaagtac ctccccgaga tcggtcagtt ctgcaatgag
120
aatccgatct ttaaggcccg cactcagggc attggttacg ctgatctgtc tacctgtatg
180
gccctgggag ttactgggtcc tgctctgcgc gctaccggcc tgccgtggga cctgcgcaag
240
accagccct attgcgatta cgacacgtat gacttcgacg tcgccacctg ggatacctgt
300
gactgttacg ggcgtttccg catccgctg gaagagatgg accagtcggt gcgcattctc
360
aagcaatgcc tcaaacgcct cgaggacacc cagggtgacc gtaatatggt cgagga
416

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<210> 1154
 <211> 138
 <212> PRT
 <213> Homo sapiens

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<400> 1154
Ala Trp Ile Arg Pro Gly Gly Val Ala Thr Asp Leu Pro Glu Thr Gly
1      5      10      15
Leu Asp Gln Leu Arg Asp Leu Ile Lys Arg Met Glu Lys Tyr Leu Pro
20     25     30
Glu Ile Gly Gln Phe Cys Asn Glu Asn Pro Ile Phe Lys Ala Arg Thr
35     40     45
Gln Gly Ile Gly Tyr Ala Asp Leu Ser Thr Cys Met Ala Leu Gly Val
50     55     60
Thr Gly Pro Ala Leu Arg Ala Thr Gly Leu Pro Trp Asp Leu Arg Lys
65     70     75     80
Thr Gln Pro Tyr Cys Asp Tyr Asp Thr Tyr Asp Phe Asp Val Ala Thr
85     90     95
Trp Asp Thr Cys Asp Cys Tyr Gly Arg Phe Arg Ile Arg Leu Glu Glu
100    105    110
Met Asp Gln Ser Val Arg Ile Leu Lys Gln Cys Leu Lys Arg Leu Glu
115    120    125
Asp Thr Gln Gly Asp Arg Asn Met Val Glu
130    135

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<210> 1155
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1155
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 60
 tggccttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaaccaa
 120
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga
 180
 gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg
 240
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc
 300
 tgttccttca gggactccat agtatttttt ttcacgcgt
 339

<210> 1156
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1156
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala
 1 5 10 15
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe
 20 25 30
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe
 35 40 45
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala
 50 55 60
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser
 65 70 75 80
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg
 85 90

<210> 1157
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1157
 nnacagcctc tctccgaccc ggcggcggtt gcacacgtcc ccgtctgagg agtattcgtg
 60
 ctggcaaaac tcgtgacctg acacctgagg gcctatcggt tgcacgttgc cgtcatcatc
 120
 gttatgcagg tttgcgcca aatcgcggcc ctgaccttgc caaccatcaa cgcagacatc
 180
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg
 240
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgccgctcag
 300

gtggcgatgg gaatggggccg tgacgttcgc gacgccatct tcacccgcac ccttgacttc
360
tcggccccggg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac
420
gtccag
426

<210> 1158
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1158
Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His
1 5 10 15
Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu
20 25 30
Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr
35 40 45
Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val
50 55 60
Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala
65 70 75 80
Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr
85 90 95
Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro
100 105 110
Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln
115 120

<210> 1159
<211> 434
<212> DNA
<213> Homo sapiens

<400> 1159
tctctccgac cgcgcctggg gcccggtggg gtcctgcggg gacgcgggag aggacggcgc
60
ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgctgcctct gccacgggaa
120
gttttctctc agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag
180
gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt
240
ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca
300
gtgccacagc cttctcaagt ccttcctgca gaggggtcaac gcctccccgg ctggtcgccg
360
gaagccttgt gcaaaggctg gtgcccagcc cccaacaggg gcagaggagg gagcgtgtct
420
ggtggatctg atca
434

<210> 1160

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1160
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu
 1 5 10 15
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser
 20 25 30
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val
 35 40 45
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys
 50 55 60
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln
 65 70 75 80
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val
 85 90 95
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp
 100 105 110
 Leu Ile

<210> 1161
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1161
 ctgcacacac accaggccac gccacagagg acggccagtc agcatgcagc caatacaccc
 60
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc
 120
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcgttt
 180
 atcattccag aagagcagca ggcagaacct tcacctccca agagctgcaa gtgcgctgtg
 240
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga
 300
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca
 355

<210> 1162
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1162
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro
 1 5 10 15
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys
 20 25 30
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe
 35 40 45
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

50 55 60
 Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
 65 70 75 80
 Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
 85 90 95
 Val Met Gly Glu Asn Thr
 100

<210> 1163

<211> 466

<212> DNA

<213> Homo sapiens

<400> 1163

ngcgcgccag gaagcgggag gtcagctgta caccagggt aatagaactt ctaccctcag
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 aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
 120
 gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
 180
 cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
 240
 tgtggggagc ccaggcccga ggtgcgttgg cagaactcca aaggtgacct cagtgattcc
 300
 agcaagtaca agatctcttc cagccctggc agcaaggagc acgtgctgca gatcaacaag
 360
 ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
 420
 gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
 466

<210> 1164

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1164

Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
 1 5 10 15
 Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
 20 25 30
 Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
 35 40 45
 Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
 50 55 60
 Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
 65 70 75 80
 Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
 85 90 95
 Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
 100 105 110
 Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
 115 120 125

<210> 1165
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1165
 tgggtggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc
 60
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt
 120
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga
 180
 ttccccgccg ctgaacactg gaaagtgtat ctggtgacga tgctcatctc ctctgtctcc
 240
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg
 300
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggtcc acacttctgg
 360
 gaactgggtca tcggcgtaga gcttttcttc ctgccttcta atctcatgga agcc
 414

<210> 1166
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1166
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly
 1 5 10 15
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu
 20 25 30
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr
 35 40 45
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala
 50 55 60
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser
 65 70 75 80
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg
 85 90 95
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu
 100 105 110
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu
 115 120 125
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala
 130 135

<210> 1167
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1167
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ctgttgggac cggctggcta aggcctgggc accggtagcg gcctggtgga taccctcatg
 120
 tagccgggtg acctgcctga ccatcttcgg caaaccagtg cgcagttgtg tggatgaactc
 180
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgtcgat
 240
 gctcttgcca gagttcggat ccttgatcgc catcgccctg acggccaccc ccgaccagc
 300
 ccgcacgccc agggcgtacc catcggtcat cgcgtcgcg acgatgggta ccaggtcgtg
 360
 gcattcctgc gcggtgtggc ttgcacgca tcgacgcagg aagtcagcct cgtcccgga
 420
 cagggttcc ttactaagtt ccgcggtttt ctttcccgac gcgt
 464

<210> 1168

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20						25					30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35					40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50					55					60				
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70					75				80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90						95	
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105					110		

<210> 1169

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1169

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 120
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag
 180
 agggaaagta ttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc
 240
 agccagtaca gtatcgaccc tgtaactcgg tatcccaata tcaacgtcaa cttcctccgg
 300
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg
 360

gagagcctgg tgaattcccc aaccaccccc aaattgactc gcaatgagtc tgtagctcgt
 420
 tcaagcaaac tgctggggtg gtgccagagg cagacagatg gctatgcagg ggtaaactg
 480
 acagat
 486

<210> 1170
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1170
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser
 1 5 10 15
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe
 20 25 30
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly
 35 40 45
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu
 50 55 60
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr
 65 70 75 80
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu
 85 90 95
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp
 100 105 110
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys
 115 120 125
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp
 130 135 140
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp
 145 150 155

<210> 1171
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1171
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 60
 ggcagcgcca ggtgctggcg ctgcccagagg ccccgtagca agtggggccc atagcagccg
 120
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg
 180
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt
 240
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc
 300
 tgccgggaca ctgcaggctg ggcccgcgc gcccttgag ggcaggtcaa aatcccggaa
 360
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc
 420

acctcctac
429

<210> 1172
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1172
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala
1 5 10 15
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu
20 25 30
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly
35 40 45
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys
50 55 60
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu
65 70 75 80
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Ala Gly Thr Leu Gln
85 90 95
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg
100 105 110
His Ser Val Gln Ala Asp
115

<210> 1173
<211> 435
<212> DNA
<213> Homo sapiens

<400> 1173
cgcgtcaatg acgacggcga gcattctgcc gagcaggtga tgcgagccac ccgcggtgct
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ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg
120
tactatgacg cctactacgg ctcggtcag aaagtccgta ccctcatcca acgcgacttc
180
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc
240
cggctgggtg agcgtactgc tgaccgatg gcgatgtacc gctccgatct atgcacggtc
300
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac
360
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga
420
gttggggccg ctcta
435

<210> 1174
<211> 145
<212> PRT
<213> Homo sapiens

<400> 1174

Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1 5 10 15
 Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
 20 25 30
 Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
 35 40 45
 Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
 50 55 60
 Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
 65 70 75 80
 Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
 85 90 95
 Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
 100 105 110
 Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
 115 120 125
 Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
 130 135 140
 Leu
 145

<210> 1175

<211> 729

<212> DNA

<213> Homo sapiens

<400> 1175

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 caggggttct ttccaaagtt acagtccgat gtcttggcaa caggaccaac cagtaacaat
 120
 cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
 180
 gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa
 240
 ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
 300
 aactgtaa atcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
 360
 gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc
 420
 ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
 480
 ggcttgcagg tcaagcaggg gaagtcgggtt ttgtgggtcac atttaattcc ttttcaggac
 540
 agagaagaga accaagagcc ccttgcagaa tcaccagttg ccttcggacc agaaagaaaa
 600
 aaatctgact caggagttat gttgccaacg ctcaggggtct ctcttattca ggacatgagg
 660
 catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
 720
 ctgtctcta
 729

<210> 1176
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1176
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln
 1 5 10 15
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu
 20 25 30
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr
 35 40 45
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly
 50 55 60
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu
 65 70 75 80
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val
 85 90 95
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys
 100 105 110
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala
 115 120 125
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn
 130 135 140
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His
 145 150 155 160
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile
 165 170 175
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro
 180 185 190
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu
 195 200 205
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn
 210 215 220
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg
 225 230 235 240
 Leu Ser Leu

<210> 1177
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 1177
 acgctgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc
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 cgctgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa
 120
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga
 180
 cgctgatctc ggtactgcc atggcgctcat gaaggatcgc gcgatacggg ggcacgaccc
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggtagc acgtccgtgg
300
ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg
360
tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat
420
cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga
480
cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg
540
ggctttcacc ggcagagatc atggtgtgga ccaccattgt g
581

<210> 1178
<211> 192
<212> PRT
<213> Homo sapiens

<400> 1178
Met Val Val His Thr Met Ile Ser Ala Gly Glu Ser Pro Glu Lys Trp
1 5 10 15
Thr Cys Asp Leu Gln Ala His Gly Val Thr Ala Ser Gly Arg Phe Val
20 25 30
Val Ala Gln Arg Ser His Pro Ala Gln Ala Leu Cys Gln Val Pro Ala
35 40 45
Gly Leu Pro Thr Asp Val Arg Leu Lys Ile Ser Lys Asp Ala Pro Glu
50 55 60
Pro Ala Ile Arg Leu Leu Ala Ala Thr Leu His Val Leu Gly Thr Ile
65 70 75 80
Thr Trp Leu Ala Pro Ala Gln Val Asp His Leu Leu Ala Thr Asp Val
85 90 95
Leu Pro Arg Glu Val Ser Ile Ile Ala Gly Phe Asp Asp Ala Leu Ile
100 105 110
Gly Val Val Ala Pro Tyr Arg Ala Ile Leu His Asp Ala Met Gly Ser
115 120 125
Thr Glu Ile Asp Val Pro Ala Leu Ile Asp Asn Ile Pro Asp Asp Lys
130 135 140
Val Phe Pro Ser Ala Glu Asp Glu Leu Ser Ala Leu Asp Ile Val Ala
145 150 155 160
Ser Leu Gly Asn Ala His Leu Ser Gln Leu Cys Asp Gly Val His Lys
165 170 175
Lys Thr Val Phe Gly Cys Ser Cys Trp Ser Arg Ala Thr His His Ala
180 185 190

<210> 1179
<211> 597
<212> DNA
<213> Homo sapiens

<400> 1179
gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgaggtg ctctgtgct
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gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg
120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag
 180
 ccccgccaat tcattgtctc tttcagtcctc ttctgaaggc tgcatttggc aatgtgaccc
 240
 tcgggggtggg gaaggcatca gaggaatata ggctatggga cgccagaggc agcgtcctgg
 300
 ggacaaagcc cacttcttcc catgcccagg gcttcctcat ggaccagca tgggtggacgt
 360
 ggccttcaga cgtccatggg tgggtggggga ggcacgtgct gtttgccct gtctctgctc
 420
 agagtctcat aggaagatgc atgggtccaca caacagtgag tcggcaggga gtccaggctt
 480
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtcccatt
 540
 ggtgcctcct gaatctccca cctcccgcgg cacctgcatg gcctctacct gacgcgt
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1			5					10						15	
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
		20						25					30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
		35				40						45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50				55						60				
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
65				70					75					80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85					90						95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
		100						105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgtttc cccgcgtcag atgggtctccg tggctactgc catgattccg
 60
 ttcctcgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct
 120
 gtgccgctgc tgcgttcgga ggctccgttc gtcggtaccg gstatggagca gcgtgctgct
 180
 tacgacgccg gcgatgtcat tgctgcttcg gccacagggtg tggctcgagac cgtgtcggca
 240
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc
 300

gagcgcacca accagggcac ctgctacaac cagaagccac tggtgacgag gg
352

<210> 1182

<211> 117

<212> PRT

<213> Homo sapiens

<400> 1182

Val	Asp	Tyr	Leu	Asp	Val	Ser	Pro	Arg	Gln	Met	Val	Ser	Val	Ala	Thr
1				5					10					15	
Ala	Met	Ile	Pro	Phe	Leu	Glu	His	Asp	Asp	Ala	Asn	Arg	Ala	Leu	Met
			20					25					30		
Gly	Ala	Asn	Met	Gln	Arg	Gln	Ala	Val	Pro	Leu	Leu	Arg	Ser	Glu	Ala
		35				40						45			
Pro	Phe	Val	Gly	Thr	Gly	Met	Glu	Gln	Arg	Ala	Ala	Tyr	Asp	Ala	Gly
	50					55					60				
Asp	Val	Ile	Val	Ala	Ser	Ala	Thr	Gly	Val	Val	Glu	Thr	Val	Ser	Ala
65					70					75					80
Gly	Phe	Ile	Thr	Ile	Met	Asp	Asp	Glu	Gly	Gln	Arg	His	Thr	Tyr	Leu
			85					90						95	
Leu	Arg	Lys	Phe	Glu	Arg	Thr	Asn	Gln	Gly	Thr	Cys	Tyr	Asn	Gln	Lys
		100						105						110	
Pro	Leu	Leu	Thr	Arg											
															115

<210> 1183

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1183

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cctcttcgcc cctgcccgtc cacctgttct gtccctgctca cctcctccag gaagcctgcc
120
tgcccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctccgt
180
ggctcctgga ggccaggcca cgtcctcatc ccctctgggt gagtgagagg cacagcctgg
240
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc
300
gtccaggtct gtccctgggt ggctgcgagg aggaggttgg cctcgcgcgg ccatgtgcgt
360
gacagtggag acatcgccag cctcctgctt gcacagctga cggcagcccc tctctctcca
420
gccatgtccc ca
432

<210> 1184

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1184

Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu
 1 5 10 15
 Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu
 20 25 30
 Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg
 35 40 45
 Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala
 50 55 60
 Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln
 65 70 75 80
 Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His
 85 90 95
 Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr
 100 105 110
 Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu
 115 120 125
 Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly
 130 135 140

<210> 1185

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1185

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 gaattacgcg gcaaatatgt attgttgggt gaagggtgtac ggggctctct atctaaacaa
 120
 gtcataata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggctta
 180
 aaagaaattt gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg
 240
 ggctggccat taaatggcaa tgctggcggc ggttctttta tttatcatgc agaaaacaat
 300
 caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccttac
 360
 caagaatttc aacgctttta acaccatccg attatcgagg agctattaac tggcggtaaa
 420
 cgc
 423

<210> 1186

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1186

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr
 1 5 10 15
 Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly
 20 25 30
 Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```

      35      40      45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
      50      55      60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
65      70      75      80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Ser Phe Ile Tyr His
      85      90      95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100      105      110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115      120      125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130      135      140

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<210> 1187

<211> 387

<212> DNA

<213> Homo sapiens

<400> 1187

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acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagcgaa ttcaggggct
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aaggtccagg gctataatgc aatagatggc atagtcggtg ggaacttaga agatatggta
120
gtacccactg ctggaatttc tctcaagca acatcaagtg ttgatttaa agtgaatctt
180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatec agccaatcca
240
gatacttatg actataactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
300
attatgtatt actatgctaa aagtgatgta gcaaatacct atcagggtta tgccacggta
360
gatgggaagt cgactgatga taccggt
387

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<210> 1188

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1188

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Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
1      5      10      15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
20     25     30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
35     40     45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
50     55     60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
65     70     75     80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
85     90     95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

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	100		105		110										
Thr	Tyr	Gln	Val	Tyr	Ala	Thr	Val	Asp	Gly	Lys	Ser	Thr	Asp	Asp	Thr
	115		120		125										
Gly															

<210> 1189
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1189
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 60
 ctgggtgctg gtttcattgg cggcatcggt gcagggtttc tggccggtta cagcgccaag
 120
 gccattgccc gctgggcaag gctgcccagc agcctggatg cgctcaaacc gattctgatc
 180
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg
 240
 gtggcgccca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc
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 attctcctgg gcntgttgct cggcggctag
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<210> 1190
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1190
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu
 1 5 10 15
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly
 20 25 30
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu
 35 40 45
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu
 50 55 60
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro
 65 70 75 80
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly
 85 90 95
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly
 100 105

<210> 1191
 <211> 351
 <212> DNA
 <213> Homo sapiens

<400> 1191
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gcagggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag
120
gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccg cgacgcactc
180
gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg
240
ccctcggggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac
300
cgggccttct tcgagccggg cgtgttcggc tggcccgacc atgcctgccg c
351

<210> 1192
<211> 114
<212> PRT
<213> Homo sapiens

<400> 1192
Met Cys Gly Glu Gln Glu Ile Trp Arg Ala Met Met Thr Ser Ala Asp
1 5 10 15
Lys Ala Gly Thr Asn Gly Gln Thr Met Gln Thr Pro Pro Val Val Ser
20 25 30
Pro Gln Asp Trp Glu Ala Ala Arg Gln Gln Leu Leu Val Lys Glu Lys
35 40 45
Ala His Thr Arg Ala Arg Asp Ala Leu Ala Ala Glu Arg Arg Arg Met
50 55 60
Pro Trp Met Glu Val Thr Lys Thr Tyr Ala Phe Glu Ala Pro Ser Gly
65 70 75 80
Lys Ala Ser Leu Leu Asp Leu Phe Gln Gly Arg Lys Gln Leu Ile Leu
85 90 95
Tyr Arg Ala Phe Phe Glu Pro Gly Val Phe Gly Trp Pro Asp His Ala
100 105 110
Cys Arg

<210> 1193
<211> 722
<212> DNA
<213> Homo sapiens

<400> 1193
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cgacttagga cgcccagttt gtactcagtg tttgctcttt tatggcagag cctctgcact
120
cccagcctcc tggccccttc tgtacatgat tttccttgtg gccactccat gcatttttct
180
tggctcagga cttagtgggc ctccatggga cttggtacct ctacttggtc ctttctggaa
240
tctgtaactt tgtgttcccc accattcttt cctttatgaa ccgatggtgc aacagcatga
300
ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca
360
ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga
420

tgggttgatg aaggggtggcc acagcgcccg ggaggaaggg gccagaacgc tctctgttct
 480
 gttccatgag gaggattatg ttgggtgtgtg tagtcccctg gttcagagtt gtccagaaat
 540
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg
 600
 ttcccagccc ctacaggtgt atacagcaca aagggagggg ccccctagtg tggctgtcac
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 720
 ag
 722

<210> 1194
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1194
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys
 1 5 10 15
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe
 20 25 30
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu
 35 40 45
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser
 50 55 60
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val
 65 70 75 80
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp
 85 90 95
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val
 100 105 110
 Tyr Thr Ala Gln Arg Glu Gly Pro Pro Ser Val Ala Val Thr Glu Gly
 115 120 125
 Ser Gly Arg Pro Val Val
 130

<210> 1195
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1195
 tctagagcat gatattccgc gggcgcgccc ggggtggactt tggttcgaga gtggaactaa
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 gtgagtaatg ggggcggcgc ggccagacgc gctcccagcc tcctggcgag agtgctgccc
 120
 ggtttcccg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc
 180
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggcctgttt actctgcaga
 240
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc
 300

aagcgttaat cccgtccaac ctgtatcact gcgaagagct cgttcgggag cgcttttttg
 360
 aaatgcagat tcttagcccc caccagatc t
 391

<210> 1196
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1196
 Met Gly Ala Ala Arg Pro Asp Ala Leu Pro Ala Ser Trp Arg Glu Cys
 1 5 10 15
 Cys Pro Val Ser Arg Gly His Gly Ser Val Ser Arg Arg Gly Gly Gln
 20 25 30
 Asp Pro Ser Ser Ser Pro Val Leu Asn Lys Arg Lys Arg Gly Gly Trp
 35 40 45
 Cys Leu Asn Gly Pro Val Tyr Ser Ala Asp Ser Arg Thr Gly Arg Thr
 50 55 60
 Pro Ala Arg Pro Ile Tyr Leu Asp Trp Leu Cys Leu Lys Ala Ser Val
 65 70 75 80
 Asn Pro Val Gln Pro Val Ser Leu Arg Arg Ala Arg Ser Gly Ala Leu
 85 90 95
 Phe Gly Asn Ala Asp Ser
 100

<210> 1197
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1197
 acgcgtgatg atcatgaaaa tggtagagag cgtctagcag aagtcgcctc tgtgatgggc
 60
 tggcagcaag atgaaatcat cgttaacgta caaggggatg aaccctttct gcctgttgca
 120
 cttattcatg ccacgggttaa agcgtagcc gatgatgctg aatctgaaat ggccacgatt
 180
 gcctgtgcga ttgataacgt agcagagctg ttttaacccaa atgtagttaa agtcgtttgt
 240
 gatgaaaaac agcgcgcctt gtatttcagt cgtgcgccta tgccatggga ccgtaatggt
 300
 tttatggaaa aaacagacga tcaagcgtaa ccagcggatt ttctgcgtt gcgtcatatt
 360
 ggtccgtatg tttaccgcac gacatn
 386

<210> 1198
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1198
 Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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      1           5           10           15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
      20           25           30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
      35           40           45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
      50           55           60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
      65           70           75           80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
      85           90           95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
      100          105          110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
      115          120          125

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<210> 1199
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1199
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ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccaggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcgc ctgccaaagac cttgaccttc tggaatggcc
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tggtgatcca gttgctcc
318

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<210> 1200
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 1200
Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
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Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
      20           25           30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
      35           40           45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
      50           55           60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
      65           70           75           80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
      85           90           95
Val Ile Gln Leu Leu

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100

<210> 1201
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1201
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 atgatcctca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc
 120
 acgctgcagg cgatccgcga gctggataac gccttcgcg tgctggaaca gttcaagggc
 180
 cgccgcaagg tcacggtggt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc
 240
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggg
 300
 ggccggcggca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt
 360

<210> 1202
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1202
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro
 1 5 10 15
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp
 20 25 30
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu
 35 40 45
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val
 50 55 60
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala
 65 70 75 80
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val
 85 90 95
 Ile Thr Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala
 100 105 110
 Arg Ser Gly Thr Gln Pro Gly Gly
 115 120

<210> 1203
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 1203
 ccggatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca
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 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttgaggtt
 120

ggtcttctgg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag
 180
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcgtt
 240
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct
 300
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg
 360
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg
 420
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc
 477

<210> 1204
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1204
 Pro Asp Met Ala Ala Arg Leu His Ser Thr Arg Val Leu Gly Thr Phe
 1 5 10 15
 Gly Tyr His Ala Pro Glu Tyr Ala Met Thr Gly Gln Leu Ser Ser Lys
 20 25 30
 Ser Asp Val Tyr Ser Phe Gly Val Gly Leu Leu Glu Leu Leu Thr Gly
 35 40 45
 Arg Lys Pro Val Asp Leu Pro Leu Pro Arg Gly Gln Gln Ser Leu Val
 50 55 60
 Thr Trp Ala Thr Pro Arg Leu Cys Glu Asp Lys Val Arg Gln Cys Val
 65 70 75 80
 Asp Ser Arg Leu Gly Val Glu Tyr Pro Pro Lys Ser Val Ala Lys Phe
 85 90 95
 Ala Ala Val Ala Ala Leu Cys Val Gln Tyr Glu Ala Asp Phe Arg Pro
 100 105 110
 Asn Met Ser Ile Val Val Lys Ala Leu Gln Pro Leu Leu Asn Ala Arg
 115 120 125
 Ala Ser Asn Asn Pro Gly
 130

<210> 1205
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 1205
 acgcgttgcc attgaagact ggcaattaca cgatttacac atcattgatg ctgcagttga
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 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg
 120
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt
 180
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgcccaatc
 240
 aagatgtgga ggggaatctgt ctgcgcagaa cctggatctc gtggttgtag gacgttgccc
 300

ccttctcgct cggacgccgc tcatgctccg ccacgtcgct gagcgagtga caaggtatcc
 360
 tgggaccatg cgtatgggtt caactgaagc gctggcgaat cgtaaan
 407

<210> 1206
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1206
 Met Met Gly Glu Ile Ser His Gly Asn Lys Asn Gln Ala Ile Leu Asp
 1 5 10 15
 Thr Asp Gly Arg Gly Cys Ala Asn Gly Thr Leu Val Tyr Gln Cys Val
 20 25 30
 Ala Glu Arg Phe Lys Gly Cys Trp Pro Pro Pro Ser Leu Ala Gln Ser
 35 40 45
 Arg Cys Gly Gly Asn Leu Ser Ala Gln Asn Leu Asp Leu Val Val Val
 50 55 60
 Arg Arg Cys Pro Leu Leu Ala Arg Thr Pro Leu Met Leu Arg His Val
 65 70 75 80
 Ala Glu Arg Val Thr Arg Tyr Pro Gly Thr Met Arg Met Val Ser Thr
 85 90 95
 Glu Ala Leu Ala Asn Arg Lys
 100

<210> 1207
 <211> 292
 <212> DNA
 <213> Homo sapiens

<400> 1207
 gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag
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 gcttgcttcc attcctatgt gctttcccggt ccttgcttct ccagccatgt gtgggacaac
 120
 caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat
 180
 cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca
 240
 agtttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac
 292

<210> 1208
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1208
 Met Ser Leu Phe Ser Ser Val Asp Gly Thr Gly Glu Thr Leu Gln Asp
 1 5 10 15
 Glu Glu Ala Cys Leu His Ser Tyr Val Leu Ser Arg Pro Cys Phe Ser
 20 25 30
 Ser His Val Trp Asp Asn Gln Gly Cys Ser Pro Pro Ser Glu Phe Gln

	35					40					45								
Gly	His	Ser	Thr	Cys	Pro	Ser	Lys	Ser	Tyr	Gln	His	Leu	Ser	Trp	Leu				
	50					55					60								
Leu	Asn	Lys	Thr	Gln	Trp	His	Pro	Cys	Gly	Cys	Leu	Pro	Ser	Ser	Phe				
65					70					75					80				
Ile	Ser	Ala	Pro	Gly	Gly	Asp	Ser	Gln	Lys	Val	Ser	Ala	Ala	Pro					
				85					90					95					

<210> 1209
 <211> 431
 <212> DNA
 <213> Homo sapiens

<400> 1209
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 gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct
 120
 gcgcagggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccgt
 180
 ggtgtatttt caaatgaggc aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa
 240
 actaatgaac cggttcgcca agggttgggt gcgatggttag gtactttcct tgatacactt
 300
 attatttgta caggtttagt gattgttatt tctgggtgctt ggacagaagg attgtcgggt
 360
 gctgcgttaa catctgctgc atttaactct gcgttacctg gttggggggg atacttagtc
 420
 gctatcagct g
 431

<210> 1210
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1210
 Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile
 1 5 10 15
 Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val
 20 25 30
 Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala
 35 40 45
 Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser
 50 55 60
 Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln
 65 70 75 80
 Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe
 85 90 95
 Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly
 100 105 110
 Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe
 115 120 125
 Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

130 135 140

<210> 1211
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1211
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agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccctgac
120
tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcatcgttg
180
ccacctcctg ctctgaagac cagcccaatt cagcctatcc tcgagtcgag tctggggccc
240
tttattccct cagagcctcc tgggagcttg ccttgtggct ccttccctgc tccagtctcc
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360
gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg
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480

<210> 1212
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1212
Glu Glu Gly Arg Glu Ala Gly Glu Met Glu Ser Ser Thr Leu Gln Glu
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Ser Pro Arg Ala Arg Ala Glu Ala Val Leu Leu His Glu Met Asp Glu
20 25 30
Asp Asp Leu Ala Asn Ala Leu Ile Trp Pro Glu Ile Gln Gln Glu Leu
35 40 45
Lys Ile Ile Glu Ser Glu Glu Glu Leu Ser Ser Leu Pro Pro Pro Ala
50 55 60
Leu Lys Thr Ser Pro Ile Gln Pro Ile Leu Glu Ser Ser Leu Gly Pro
65 70 75 80
Phe Ile Pro Ser Glu Pro Pro Gly Ser Leu Pro Cys Gly Ser Phe Pro
85 90 95
Ala Pro Val Ser Thr Pro Leu Glu Val Trp Thr Arg Asp Pro Ala Asn
100 105 110
Gln Ser Thr Gln Gly Ala Ser Thr Ala Ala Ser Arg Glu Lys Pro Glu
115 120 125
Pro Glu Gln Gly Leu His Pro Asp Leu Ala Ser Leu Ala Pro Leu Glu
130 135 140
Ile Val Pro Phe Glu Lys Ala Ser Pro Glu Ala Gly Val Cys Ser Arg
145 150 155 160

<210> 1213
<211> 1141

<212> DNA
<213> Homo sapiens

<400> 1213
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cgtgatgctc aggggcgggt taccgggata gaggggccat cagggcggtg gagttacggc
120
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact
180
cacgacgcct atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc
240
tgggaccagg aaggccacct ggcgcagacg tgtacgcgtg cacacgggca tgccactgcc
300
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag
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420
accgtatcga ctacgctga tgcattgggg cgcgccagtc gtatcaccac taaggggccag
480
caggtacgag tggactggga cctcgtgacc ggagcccca cctcgattga tggtcgtcct
540
gtgcttcccc tgcccggagg acgcatcctc ggcgccacac ccatcggcga taccaaccta
600
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt
660
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcacccct
720
tgggtgggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gaccggttaa
780
ccccgcccgc cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc
840
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900
cccaccccat cggcacactc gcacactacg tcgccaacte cgtcagcaca ctcgatgcac
960
acatcaccga tccgatcagc cactggtggg ccaccacaa agaccggatc ctctcccggg
1020
acttcctgat cgggtgccggc ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg
1080
aggaccctc ctagccgcgg ccatttcggg gggactcatc tcaggcggct tttccgctag
1140
c
1141

<210> 1214
<211> 259
<212> PRT
<213> Homo sapiens

<400> 1214
Xaa His Asp Gly Gly Leu Val Cys Gly Tyr Val His Asp Gly Arg Val
1 5 10 15
Thr Arg Val Ala Arg Asp Ala Gln Gly Arg Val Thr Gly Ile Glu Gly

	20		25		30										
Pro	Ser	Gly	Arg	Trp	Ser	Tyr	Gly	Tyr	Asn	Glu	Ala	Gly	Ser	Leu	Ile
	35		40		45										
Ser	Ala	Thr	Gly	Pro	Arg	Thr	Gln	His	Asn	Trp	Thr	His	Asp	Ala	Tyr
	50		55		60										
Gly	Arg	Leu	Thr	Ser	His	Ala	Thr	Ser	Gly	Thr	Asp	Thr	Thr	Phe	Ala
65			70		75									80	
Trp	Asp	Gln	Glu	Gly	His	Leu	Ala	Gln	Thr	Cys	Thr	Arg	Ala	His	Gly
			85		90									95	
His	Ala	Thr	Ala	Thr	Gln	Tyr	Arg	Tyr	Asp	Ala	Ala	Gly	Arg	Arg	Val
	100		105		110										
Ser	Ala	Thr	Ser	Ser	Asp	Gly	Gln	Glu	Glu	Arg	Tyr	Ser	Trp	Asp	Gly
	115		120		125										
Arg	Gly	Trp	Leu	Ser	Asp	Ile	Thr	Thr	Asp	Ala	Thr	Thr	Val	Ser	Thr
	130		135		140										
His	Val	Asp	Ala	Leu	Gly	Arg	Ala	Ser	Arg	Ile	Thr	Thr	Lys	Gly	Gln
145			150		155									160	
Gln	Val	Arg	Val	Asp	Trp	Asp	Leu	Val	Thr	Gly	Ala	Pro	Thr	Ser	Ile
			165		170									175	
Asp	Gly	Arg	Pro	Val	Leu	Pro	Leu	Pro	Gly	Gly	Arg	Ile	Leu	Gly	Ala
	180		185		190										
Thr	Pro	Ile	Gly	Asp	Thr	Asn	Leu	Trp	Arg	Glu	Val	Met	Pro	Thr	Asp
	195		200		205										
Pro	Asp	Asn	Pro	Tyr	Gln	Pro	Ala	Thr	Ala	Thr	Ile	Glu	Gly	Val	Pro
	210		215		220										
Glu	Thr	Ile	Arg	Met	Ala	Gly	Asn	Thr	Leu	Val	Val	Asp	Gly	His	Pro
225			230		235									240	
Trp	Trp	Gly	Arg	Ala	Ser	Thr	Thr	Gln	Leu	Pro	Pro	Pro	Ser	Cys	Leu
			245		250									255	

Leu Thr Arg

<210> 1215
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 1215
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 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 1216

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          20          25          30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
          35          40          45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
          50          55          60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65          70          75          80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
          85          90          95
Asp Leu Gln Arg Thr Arg
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<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

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240
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420
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<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

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Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
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Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

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 Trp Ile Glu Met Arg Gly Ser Val Thr Gly Trp Asp Ser Arg His Arg
 35 40 45
 Ala Gln Met Val Arg Gly Thr Phe Glu Arg Ile Asn His Leu Ile Asp
 50 55 60
 Ala Glu Asn Glu Leu Ile Ala Ala Arg Glu Asp Ala Gln Arg Arg Glu
 65 70 75 80
 Leu Ile Leu Ser Ala Leu Leu Asn Asn Ile Pro Asp Pro Val Trp Ser
 85 90 95
 Lys Asp Glu Ser Gly Arg Tyr Leu Asp Cys Asn His Ala Phe Cys Leu
 100 105 110
 Phe Asn Gly Leu Glu Gln Ser Asp Val Gln Gly Gln Lys Asp Ser Glu
 115 120 125
 Leu Asn Leu Asp Asn Asn Gly Gln Tyr Tyr Gln Asp Met Gly Gly Glu
 130 135 140
 Val Leu Ala Arg Gly Glu Ile Phe His Glu His Cys Trp Gly Thr Pro
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 Ala Asp Gly Ser Asp Asn Arg Leu Phe Glu Val Tyr Arg Val Pro Ile
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 Lys Glu Pro Thr Val Asn
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<210> 1219
 <211> 308
 <212> DNA
 <213> Homo sapiens

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<210> 1220
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1220
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 20 25 30
 Lys Phe Pro Asp His Pro Pro Ser Phe Gln Thr Lys Thr Gly Met Ala
 35 40 45
 Leu Asn His His Pro Lys Ala Arg Gly Val Leu Lys Pro Lys Pro Ser

50	55	60
Gly Ala Gly Ala Ser Leu Phe Arg Arg Ala Gln Pro Cys Ser Leu Cys		
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Pro Phe Gly Lys Asp Arg Glu Leu Glu Leu Trp Val Gly Gly Gly		80
85	90	95

<210> 1221
 <211> 569
 <212> DNA
 <213> Homo sapiens

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 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctctc
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 300
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 420
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<210> 1222
 <211> 91
 <212> PRT
 <213> Homo sapiens

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 Arg Arg Pro Thr Cys Gln Lys Gly Pro Leu Gln Trp Cys Gly Tyr Val
 20 25 30
 Pro Ala Ile Pro Glu Cys Pro Arg Arg Thr Ser Asp Leu Thr Ser Ser
 35 40 45
 Ala Gly Ser Cys Thr Trp Asp Gln Pro Ser Glu Leu His Leu Phe Ser
 50 55 60
 Ser Val Pro Ser Glu Thr Asn Thr Lys Ile Lys Trp Glu Lys Lys Lys
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 Ser His Ser Arg His Ser Leu Pro Arg Asn Ala
 85 90

<210> 1223
 <211> 450

<212> DNA

<213> Homo sapiens

<400> 1223

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240
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300
ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgag
360
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<210> 1224

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1224

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20 25 30
Glu Trp Ser Gln Arg Met Val Thr Val Leu Ser Asp Val Leu Pro Gly
35 40 45
Val Gly Gln Gly Arg Trp Val Leu Gly Glu Thr Ala Ile Val Thr His
50 55 60
Asn Leu Ala Gln Leu Gly Val Asn Asn Gly Asp Cys Gly Val Ile Val
65 70 75 80
Glu Thr Arg Pro Val Pro Thr Ile Ala Leu Pro Gly Pro Gly Gly Val
85 90 95
Pro Arg Arg Leu Pro Cys Ser Leu Ile Pro Ser Leu Gln Pro Leu Gln
100 105 110
Ala Met Thr Ile His Lys Ala Gln Gly Ser Gln Phe Thr Asp Val Thr
115 120 125
Val Val Leu Pro Pro Pro Asp Ser Pro Leu Leu Ser Arg Glu Leu Leu
130 135 140
Tyr Thr Ala Ile Thr Arg
145 150

<210> 1225

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1225

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<210> 1226
 <211> 139
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Lys Thr Gln Ser Pro Pro Lys Val Arg Ser Arg Lys Lys Pro Asp Pro
 35 40 45
 Asp Gln Met Lys Gly Pro Gly Lys Phe Leu Glu Lys Arg Leu Leu Lys
 50 55 60
 Cys Leu Leu Ala Gly Ile Thr Val Ser Trp Gly Phe Ala His Ser Ile
 65 70 75 80
 Phe Met Ala Phe His Asn Asp Pro Arg Thr Asp Pro Glu Lys Pro Arg
 85 90 95
 Asp Gln Gly Leu Thr Arg Pro Cys His His Pro Ile Leu Gln Met Arg
 100 105 110
 Thr Leu Arg Pro Gly Glu Lys Gly Gly Val Asp Gly Thr Arg Trp Pro
 115 120 125
 Gly Ser Lys Thr Gln Arg Leu Glu Cys Ala His
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<210> 1227
 <211> 756
 <212> DNA
 <213> Homo sapiens

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attgtcgaag cacataatgg ccgtatttgg gcaaatagtg tcgaaggaca aggtacatct
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 660
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<210> 1228
 <211> 97
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Ile Phe Asp Arg Phe Tyr Arg Val Asp Lys Ala Arg Thr Arg Lys Met
 35 40 45
 Gly Gly Thr Gly Leu Gly Leu Ala Ile Ser Lys Glu Ile Val Glu Ala
 50 55 60
 His Asn Gly Arg Ile Trp Ala Asn Ser Val Glu Gly Gln Gly Thr Ser
 65 70 75 80
 Ile Phe Ile Thr Leu Pro Cys Glu Ile Ile Glu Asp Gly Asp Trp Asp
 85 90 95
 Glu

<210> 1229
 <211> 377
 <212> DNA
 <213> Homo sapiens

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 ccgctggccg tgctatctaa ctgtccgcgg atgctctggg actatttcag tcagcttttc
 180

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 360
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 377

<210> 1230
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1230
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 20 25 30
 Gly Thr Asp Thr Pro Leu Ala Val Leu Ser Asn Cys Pro Arg Met Leu
 35 40 45
 Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu
 50 55 60
 Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly
 65 70 75 80
 Pro Glu Ala Asn Leu Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val
 85 90 95
 Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile
 100 105 110
 His Ile Asp Ala Asp Gly Glu His Pro
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<210> 1231
 <211> 351
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 1232
 <211> 91
 <212> PRT

<213> Homo sapiens

<400> 1232

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Val Leu Ala Leu Leu Glu His Gly Glu Asp Val Val Val Leu Asp Asn
      20           25           30
Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
      35           40           45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
      50           55           60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
      65           70           75           80
Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
      85           90

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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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960

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 tgtttgggcg accaagatct aataattaaa acccaggtgg accatggaaa aaaaaaaaaa
 4980
 aa
 4982

<210> 1234
 <211> 708
 <212> PRT
 <213> Homo sapiens

<400> 1234
 Met Ser Glu Arg Gly Ile Lys Trp Ala Cys Glu Tyr Cys Thr Tyr Glu
 1 5 10 15
 Asn Trp Pro Ser Ala Ile Lys Cys Thr Met Cys Arg Ala Gln Arg Pro
 20 25 30
 Ser Gly Thr Ile Ile Thr Glu Asp Pro Phe Lys Ser Gly Ser Ser Asp
 35 40 45
 Val Gly Arg Asp Trp Asp Pro Ser Ser Thr Glu Gly Gly Ser Ser Pro
 50 55 60
 Leu Ile Cys Pro Asp Ser Ser Ala Arg Pro Arg Val Lys Ser Ser Tyr
 65 70 75 80
 Ser Met Glu Asn Ala Asn Lys Trp Ser Cys His Met Cys Thr Tyr Leu
 85 90 95
 Asn Trp Pro Arg Ala Ile Arg Cys Thr Gln Cys Leu Ser Gln Arg Arg
 100 105 110
 Thr Arg Ser Pro Thr Glu Ser Pro Gln Ser Ser Gly Ser Gly Ser Arg
 115 120 125
 Pro Val Ala Phe Ser Val Asp Pro Cys Glu Glu Tyr Asn Asp Arg Asn
 130 135 140
 Lys Leu Asn Thr Arg Thr Gln His Trp Thr Cys Ser Val Cys Thr Tyr

145		150		155		160
Glu Asn Trp Ala Lys	Ala Lys Arg Cys Val Val Cys Asp His Pro Arg					
	165		170			175
Pro Asn Asn Ile Glu	Ala Ile Glu Leu Ala Glu Thr Glu Glu Ala Ser					
	180		185			190
Ser Ile Ile Asn Glu Gln Asp	Arg Ala Arg Trp Arg Gly Ser Cys Ser					
	195		200			205
Ser Gly Asn Ser Gln Arg Arg	Ser Pro Pro Ala Thr Lys Arg Asp Ser					
	210		215			220
Glu Val Lys Met Asp Phe Gln Arg	Ile Glu Leu Ala Gly Ala Val Gly					
225		230		235		240
Ser Lys Glu Glu Leu Glu Val Asp	Phe Lys Lys Leu Lys Gln Ile Lys					
	245		250			255
Asn Arg Met Lys Lys Thr Asp	Trp Leu Phe Leu Asn Ala Cys Val Gly					
	260		265			270
Val Val Glu Gly Asp Leu Ala Ala	Ile Glu Ala Tyr Lys Ser Ser Gly					
	275		280			285
Gly Asp Ile Ala Arg Gln Leu Thr	Ala Asp Glu Val Arg Leu Leu Asn					
	290		295			300
Arg Pro Ser Ala Phe Asp Val Gly	Tyr Thr Leu Val His Leu Ala Ile					
305		310		315		320
Arg Phe Gln Arg Gln Asp Met	Leu Ala Ile Leu Leu Thr Glu Val Ser					
	325		330			335
Gln Gln Ala Ala Lys Cys Ile Pro	Ala Met Val Cys Pro Glu Leu Thr					
	340		345			350
Glu Gln Ile Arg Arg Glu Ile Ala	Ala Ser Leu His Gln Arg Lys Gly					
	355		360			365
Asp Phe Ala Cys Tyr Phe Leu Thr	Asp Leu Val Thr Phe Thr Leu Pro					
	370		375			380
Ala Asp Ile Glu Asp Leu Pro Pro	Thr Val Gln Glu Lys Leu Phe Asp					
385		390		395		400
Glu Val Leu Asp Arg Asp Val Gln	Lys Glu Leu Glu Glu Glu Ser Pro					
	405		410			415
Ile Ile Asn Trp Ser Leu Glu Leu	Ala Thr Arg Leu Asp Ser Arg Leu					
	420		425			430
Tyr Ala Leu Trp Asn Arg Thr Ala	Gly Asp Cys Leu Leu Asp Ser Val					
	435		440			445
Leu Gln Ala Thr Trp Gly Ile Tyr	Asp Lys Asp Ser Val Leu Arg Lys					
	450		455			460
Ala Leu His Asp Ser Leu His Asp	Cys Ser His Trp Phe Tyr Thr Arg					
465		470		475		480
Trp Lys Asp Trp Glu Ser Trp Tyr	Ser Gln Ser Phe Gly Leu His Phe					
	485		490			495
Ser Leu Arg Glu Glu Gln Trp Gln	Glu Asp Trp Ala Phe Ile Leu Ser					
	500		505			510
Leu Ala Ser Gln Pro Gly Ala Ser	Leu Glu Gln Thr His Ile Phe Val					
	515		520			525
Leu Ala His Ile Leu Arg Arg Pro	Ile Ile Val Tyr Gly Val Lys Tyr					
	530		535			540
Tyr Lys Ser Phe Arg Gly Glu Thr	Leu Gly Tyr Thr Arg Phe Gln Gly					
545		550		555		560
Val Tyr Leu Pro Leu Leu Trp Glu	Gln Ser Phe Cys Trp Lys Ser Pro					
	565		570			575
Ile Ala Leu Gly Tyr Thr Arg Gly	His Phe Ser Ala Leu Val Ala Met					

580 585 590
 Glu Asn Asp Gly Tyr Gly Asn Arg Gly Ala Gly Ala Asn Leu Asn Thr
 595 600 605
 Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg
 610 615 620
 Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu
 625 630 635 640
 Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr
 645 650 655
 Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn
 660 665 670
 His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg
 675 680 685
 Gln Ile Arg Pro Cys Thr Ser Leu Ser Asp Gly Glu Glu Asp Glu Asp
 690 695 700
 Asp Glu Asp Glu
 705

<210> 1235
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 1235
 gcgtctcagg ccgtgnectca gatacctgtc gatatgacga ccttgggcgc tgatttggtg
 60
 gccttcaccg gtcacaagat gtgcgggtccg acgggtatcg gcattctctg gggacgctat
 120
 gacctctctg ctgagctacc gcccttctctc ggaggcggcg agatgatcga ggctgtgcgc
 180
 atggagggat cgacctacgc cgagcctcca catcgttttg aggcaggcac cccgccgatc
 240
 gcacagctgg ctgccctcgg ggtggccgcc gactacctag atggcatcgg gatgcaggcc
 300
 atcgccgagc acgaacatga gctggctgct cggatgctcg aagactacca gaccgtcaag
 360
 ggagtgcagc cggagagagg ctg
 383

<210> 1236
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1236
 Ala Ser Gln Ala Val Xaa Gln Ile Pro Val Asp Met Thr Thr Leu Gly
 1 5 10 15
 Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly
 20 25 30
 Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro
 35 40 45
 Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser
 50 55 60
 Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

65		70		75		80									
Ala	Gln	Leu	Ala	Ala	Leu	Gly	Val	Ala	Ala	Asp	Tyr	Leu	Asp	Gly	Ile
			85					90						95	
Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met
		100					105						110		
Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly	
		115				120						125			

<210> 1237
 <211> 1608
 <212> DNA
 <213> Homo sapiens

<400> 1237
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 60
 acaccagcac attctgactc aacatggcta tacgggtgtc atcgctgaag aaaggctcaa
 120
 tgctggccta gggccggggc tactagaaca aggtgatctg ggctcttggg atctgctcat
 180
 ttgcctgtct tctaagaaag cagaaggaac accctgtata tccaaggaag tcatgtgcca
 240
 gttaggttta catcaaaagg caaacagatt accagaaata cagcagccac tttgcagaaa
 300
 ggaaggatta tgtcaaatag ttagaagatt cccagaactg caacttcag tgagtccctc
 360
 tgtgtgtctg gatcaggga tgcaattaaa gccgagtact tcgagtcacc ttttaaaaac
 420
 agtgaagcca cgtgtgtgga aaccagggga ctggagtcgt gaacagctga atgaaacgac
 480
 agtccttgct ccacatgaaa caatctttcg agccaaagat ctatctgtga ttcttaaagc
 540
 gtatgtgttg gtgacgtcct taaccctttt gcgtgcattc attcattcga ctggcacagt
 600
 ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt
 660
 cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaact
 720
 actgctagcc gctgaagtat tcagtgaaac atctactctg ggaccaaaga ccttccatag
 780
 atgcagattc tgctttcaac ttctaacttt tgatattggt tatggcagtt tcatgtaccc
 840
 tgtagtgctc caggtagacg agcattttaa ttttcaagat tatgataata tggattttga
 900
 ggaccaaata acagaagaat tcctttttaa tgacactttc aattttctct tccctaata
 960
 atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
 1020
 gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat
 1080
 tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccatctac
 1140
 tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaata ctgtgggaaa
 1200

tcctggctca gtcctgaccc aatactgggc tcttttaaat gtatttgaac aatttcagtt
 1260
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa
 1320
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaat aaaaaagctg cagttccaca
 1380
 aattaaaaat gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat
 1440
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa
 1500
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc
 1560
 taagtgtctg tgcaaggtgc acctgtacga gcaggcaggg ccaagctt
 1608

<210> 1238
 <211> 458
 <212> PRT
 <213> Homo sapiens

<400> 1238
 Met Cys Gln Leu Gly Leu His Gln Lys Ala Asn Arg Leu Pro Glu Ile
 1 5 10 15
 Gln Gln Pro Leu Cys Arg Lys Glu Gly Leu Cys Gln Ile Val Arg Arg
 20 25 30
 Phe Pro Glu Leu Gln Leu Pro Val Ser Pro Ser Val Cys Leu Asp Gln
 35 40 45
 Gly Met Gln Leu Lys Pro Ser Thr Ser Ser His Leu Leu Lys Thr Val
 50 55 60
 Lys Pro Arg Val Trp Lys Pro Gly Asp Trp Ser Arg Glu Gln Leu Asn
 65 70 75 80
 Glu Thr Thr Val Leu Ala Pro His Glu Thr Ile Phe Arg Ala Lys Asp
 85 90 95
 Leu Ser Val Ile Leu Lys Ala Tyr Val Leu Val Thr Ser Leu Thr Pro
 100 105 110
 Leu Arg Ala Phe Ile His Ser Thr Gly Thr Val Trp Asn Pro Pro Lys
 115 120 125
 Lys Lys Arg Phe Thr Val Lys Leu Gln Thr Phe Phe Glu Thr Phe Leu
 130 135 140
 Arg Ala Ser Ser Pro Gln Gln Ala Phe Asp Ile Met Lys Glu Ala Ile
 145 150 155 160
 Gly Lys Leu Leu Leu Ala Ala Glu Val Phe Ser Glu Thr Ser Thr Leu
 165 170 175
 Gly Pro Lys Thr Phe His Arg Cys Arg Phe Cys Phe Gln Leu Leu Thr
 180 185 190
 Phe Asp Ile Gly Tyr Gly Ser Phe Met Tyr Pro Val Val Leu Gln Val
 195 200 205
 His Glu His Leu Asn Phe Gln Asp Tyr Asp Asn Met Asp Phe Glu Asp
 210 215 220
 Gln Asn Thr Glu Glu Phe Leu Leu Asn Asp Thr Phe Asn Phe Leu Phe
 225 230 235 240
 Pro Asn Glu Ser Ser Leu Ser Ile Phe Ser Glu Ile Phe Gln Arg Leu
 245 250 255
 Tyr Arg Ser Asp Val Phe Lys Gly Glu Asn Tyr Gln Lys Glu Leu Asn

260																265																270															
Gln	Cys	Leu	Ser	Leu	Glu	Glu	Ile	Asn	Ser	Ile	Met	Thr	Phe	Ile	Lys	Gln	Cys	Leu	Ser	Leu	Glu	Glu	Ile	Asn	Ser	Ile	Met	Thr	Phe	Ile	Lys	Gln	Cys	Leu	Ser	Leu	Glu	Glu	Ile	Asn	Ser	Ile	Met	Thr	Phe	Ile	Lys
275																280																285															
Glu	Leu	Gly	Ser	Leu	Gly	Gln	Phe	Gln	Leu	Leu	Phe	Pro	Ser	Thr	Thr	Glu	Leu	Gly	Ser	Leu	Gly	Gln	Phe	Gln	Leu	Leu	Phe	Pro	Ser	Thr	Thr	Glu	Leu	Gly	Ser	Leu	Gly	Gln	Phe	Gln	Leu	Leu	Phe	Pro	Ser	Thr	Thr
290																295																300															
Pro	Gly	Ile	Gln	Ser	Leu	Met	His	Glu	Phe	Tyr	Asp	Val	Ala	Asn	Pro	Pro	Gly	Ile	Gln	Ser	Leu	Met	His	Glu	Phe	Tyr	Asp	Val	Ala	Asn	Pro	Pro	Gly	Ile	Gln	Ser	Leu	Met	His	Glu	Phe	Tyr	Asp	Val	Ala	Asn	Pro
305																310																315															
Val	Gly	Asn	Pro	Gly	Ser	Val	Leu	Thr	Gln	Tyr	Trp	Ser	Leu	Leu	Asn	Val	Gly	Asn	Pro	Gly	Ser	Val	Leu	Thr	Gln	Tyr	Trp	Ser	Leu	Leu	Asn	Val	Gly	Asn	Pro	Gly	Ser	Val	Leu	Thr	Gln	Tyr	Trp	Ser	Leu	Leu	Asn
320																325																330															
Val	Phe	Glu	Gln	Phe	Gln	Phe	Met	Asn	Lys	Lys	Thr	Gln	Pro	His	Pro	Val	Phe	Glu	Gln	Phe	Gln	Phe	Met	Asn	Lys	Lys	Thr	Gln	Pro	His	Pro	Val	Phe	Glu	Gln	Phe	Gln	Phe	Met	Asn	Lys	Lys	Thr	Gln	Pro	His	Pro
335																340																345															
Leu	Glu	Trp	Asn	Ser	Phe	Thr	Glu	Asp	Lys	Asn	Ile	Glu	Lys	Pro	Gln	Leu	Glu	Trp	Asn	Ser	Phe	Thr	Glu	Asp	Lys	Asn	Ile	Glu	Lys	Pro	Gln	Leu	Glu	Trp	Asn	Ser	Phe	Thr	Glu	Asp	Lys	Asn	Ile	Glu	Lys	Pro	Gln
350																355																360															
Val	Pro	Phe	Asp	Ala	Ile	Glu	Asn	Lys	Lys	Ala	Ala	Val	Pro	Gln	Ile	Val	Pro	Phe	Asp	Ala	Ile	Glu	Asn	Lys	Lys	Ala	Ala	Val	Pro	Gln	Ile	Val	Pro	Phe	Asp	Ala	Ile	Glu	Asn	Lys	Lys	Ala	Ala	Val	Pro	Gln	Ile
365																370																375															
Lys	Asn	Glu	Asn	Lys	Glu	Ile	His	Cys	Ser	Asp	Asp	Glu	Asn	Thr	Pro	Lys	Asn	Glu	Asn	Lys	Glu	Ile	His	Cys	Ser	Asp	Asp	Glu	Asn	Thr	Pro	Lys	Asn	Glu	Asn	Lys	Glu	Ile	His	Cys	Ser	Asp	Asp	Glu	Asn	Thr	Pro
380																385																390															
Cys	His	Ile	Lys	Gln	Ile	Phe	Thr	His	Pro	His	Leu	Glu	Leu	Asn	Pro	Cys	His	Ile	Lys	Gln	Ile	Phe	Thr	His	Pro	His	Leu	Glu	Leu	Asn	Pro	Cys	His	Ile	Lys	Gln	Ile	Phe	Thr	His	Pro	His	Leu	Glu	Leu	Asn	Pro
395																400																405															
Asp	Phe	His	Pro	Lys	Ile	Lys	Asp	Tyr	Tyr	Cys	Glu	Val	Pro	Phe	Asp	Asp	Phe	His	Pro	Lys	Ile	Lys	Asp	Tyr	Tyr	Cys	Glu	Val	Pro	Phe	Asp	Asp	Phe	His	Pro	Lys	Ile	Lys	Asp	Tyr	Tyr	Cys	Glu	Val	Pro	Phe	Asp
410																415																420															
Val	Val	Thr	Val	Thr	Ile	Gly	Val	Glu	Thr	Pro	Lys	Cys	Leu	Cys	Lys	Val	Val	Thr	Val	Thr	Ile	Gly	Val	Glu	Thr	Pro	Lys	Cys	Leu	Cys	Lys	Val	Val	Thr	Val	Thr	Ile	Gly	Val	Glu	Thr	Pro	Lys	Cys	Leu	Cys	Lys
425																430																435															
Val	His	Leu	Tyr	Glu	Gln	Ala	Gly	Pro	Ser							Val	His	Leu	Tyr	Glu	Gln	Ala	Gly																								

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<210> 1239
<211> 447
<212> DNA
<213> Homo sapiens
```

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<400> 1239
atacctactg aacgtgaacg aacagaaaagg ctaattaaaa ccaaattaag ggagatcatg
60
atgcagaagg atttgagagaa tattacatcc aaagagataa gaacagagtt ggaaatgcaa
120
atgggtgtgca acttgcggga attcaaggaa tttatagaca atgaaatgat agtgatcctt
180
ggtcaaattg atagccctac acagatatatt gagcatgtgt tcctgggctc agaatggaat
240
gcctccaact tagaggactt acagaaccga ggggtacggt atatcttgaa tgtcactcga
300
gagatagata actttttccc aggagtcttt gagtatcata acattcgggt atatgatgaa
360
gaggcaacgg atctcctggc gtactggaat gacacttaca aattcatctc taaagcaaag
420
aaacatggat ctaaatgcct tgtgcac
447
```

```
<210> 1240
<211> 149
<212> PRT
<213> Homo sapiens
```

<400> 1240

```

Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu
 1           5           10           15
Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu
      20           25           30
Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe
      35           40           45
Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp
      50           55           60
Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn
      65           70           75           80
Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu
      85           90           95
Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr
      100          105          110
His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr
      115          120          125
Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser
      130          135          140
Lys Cys Leu Val His
145

```

<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

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acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg
60
aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag
120
taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga
180
gagagaaaga aagaagaaag gtcccattg caacgtgtca gatcttgcaa cttccccccc
240
accaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc
300
agggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga
360
ggatttgtgt tgtgaggtcg gtggtgcgtt cttttctttc tcttctcgcc tgttttcccg
420
gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt
480
attcatgct
489

```

<210> 1242

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1242

```

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe

```

```

      1           5           10           15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20           25           30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35           40           45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50           55           60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65           70           75           80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85           90           95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100          105          110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115          120          125

```

<210> 1243
 <211> 390
 <212> DNA
 <213> Homo sapiens

```

<400> 1243
ntagactccg tcgatccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgtgtgtgt cctaccacc cgcagtcctc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244
 <211> 130
 <212> PRT
 <213> Homo sapiens

```

<400> 1244
Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
      1           5           10           15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20           25           30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35           40           45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50           55           60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65           70           75           80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

	85		90		95										
Arg	Leu	Asn	Pro	Lys	Arg	Ala	Leu	Arg	Asp	Ala	Ala	Arg	Ala	Ala	Gln
		100						105					110		
Ala	His	Arg	Ala	Ser	Thr	Xaa	Ala	Gln	Ala	Ala	Ile	Lys	Ala	Asp	Gln
		115					120					125			
Glu	Ala														
	130														

<210> 1245
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1245
 gccaaagcagc aaaaaccaca gatcattgct atgggaaatg tgcatttttc ttgttcacaa
 60
 ccacaatcta tgcccgtagc ttttctgagc tccaggagtt ttttagcact gccagacttc
 120
 tctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcagggctt
 180
 ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
 240
 aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
 300
 gaattaaatg atgggcagtg gcattctgtc tctttatct
 339

<210> 1246
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1246
 Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
 1 5 10 15
 Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
 20 25 30
 Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
 35 40 45
 Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
 50 55 60
 Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
 65 70 75 80
 Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
 85 90 95
 Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
 100 105 110
 Ser

<210> 1247
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac gcgcatacctg cccagatcc cgatggatgg gcatgacctc
 60
 aaccgggtgt ggcgggacgt cggcctgac gtgcacccgc cgatgctcta catgggctac
 120
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgcct tgctcggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcggt cctcggtatc
 240
 ggtatcacc ctcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtgggtc
 300
 tgggaccccg gggaaaaccc cttcttcacg ccctggctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5					10					15	
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25					30		
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
		35				40						45			
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50					55				60					
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65					70					75				80	
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85					90					95		
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100					105					110		
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
		115					120								

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg
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 ggcgcgcagt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
 120
 attccactgg aaagcgccgt ggcggatgcg gtggtgtgcg cacaagcctt ccattggttt
 180
 tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatac
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgaga agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1250
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro
 1 5 10 15
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His
 20 25 30
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala
 35 40 45
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala
 50 55 60
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly
 65 70 75 80
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile
 85 90 95
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr
 100 105 110
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe
 115 120

<210> 1251
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 1251
 accggtctct tcctcgaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
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 gcggaggcgg cagcacgtgg gagcgacggg cgggccaggc gcgcagttgg gcgcctcctt
 120
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgctcca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggcctacaac gtcatacgc cctttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtggg gactctgtca accaccgct gctcttcagt ggctaccagc
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcactgcatg tggtagatcc
 600
 ccttcttctt catcctcttc atgtacttca gcggtgctn ttactgcctc taaagctgag
 660
 agcttgattc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtag
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252
 <211> 80
 <212> PRT
 <213> Homo sapiens

<400> 1252
 Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
 1 5 10 15
 Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
 20 25 30
 Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
 35 40 45
 Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser
 50 55 60
 Ser Ser Ser Ser Gly Pro Pro Ala Pro Cys Tyr Ala Pro Ser Arg Thr
 65 70 75 80

<210> 1253
 <211> 675
 <212> DNA
 <213> Homo sapiens

<400> 1253
 gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
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 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattgaa
 240
 acagtctgtg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtcctcaa
 480
 ccacccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa
 540
 gccatgtctg agggggatgc tccaaccct ttttccagag gcagccggac tcgtgcgagc
 600
 cttcctgtgg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttgggcg taacgctata ctgtctgctg
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ttcggtcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag tatcctgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcatggt aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtac aaggcccgcg g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

      35          40          45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
      50          55          60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65          70          75          80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85          90          95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
      100          105          110
Trp

```

<210> 1257
 <211> 294
 <212> DNA
 <213> Homo sapiens

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<400> 1257
cgcgtagcagc tgattgaagg tgatgtcgcc aacgcgcgacc tggtaggcgca agccgcatc
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ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccggtg tgaagcgtgt ggtatttgc tccagcggtg cggtgtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
294

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<210> 1258
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 1258
Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
1      5      10      15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
      20      25      30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
      35      40      45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
      50      55      60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65          70          75          80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85          90          95
Tyr Ala

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<210> 1259
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 1259
 nnacactcta gcctctgact caaggaagct gccagggctc ttgcccttcg gtttgggggg
 60
 atcccgtctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgtggc
 120
 ctccacgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
 180
 agcgtgggtg acgtggctaa gggagtggc cagggaggcc tggacaccac tcggtctgca
 240
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
 300
 ggggccgtcc aagggggctt ggacacctcg aaggctgtcc tcaccggcac caaggacacg
 360
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
 417

<210> 1260
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1260
 Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro
 1 5 10 15
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg
 20 25 30
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala
 35 40 45
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val
 50 55 60
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu
 65 70 75 80
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala
 85 90 95
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys
 100 105 110
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly
 115 120 125
 Pro Val Gln Ala Gly
 130

<210> 1261
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1261
 ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
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 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtaaggcag ccgcctgctg
 120tgaccctggc ggtcggctgg tggatcgaca acaaggctcag cgcccgcctg 180
 ggcaaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
 240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
300

accacctcgt tcgtcgcgga catcgggtgct
330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa	Ala	Arg	Ala	Val	Arg	His	Gln	Glu	Met	Asn	Met	Asp	Leu	Asn	Ala
1			5						10					15	
Glu	Val	Asp	Gln	Leu	Val	Arg	Gln	Ser	Gln	Thr	Trp	Ile	Pro	Leu	Ile
		20						25					30		
Met	Glu	Tyr	Gly	Ser	Arg	Leu	Leu	Leu	Ala	Leu	Leu	Thr	Leu	Ala	Val
		35				40						45			
Gly	Trp	Trp	Ile	Asp	Asn	Lys	Val	Ser	Ala	Arg	Leu	Gly	Lys	Leu	Val
	50				55						60				
Gly	Leu	Arg	Asn	Ala	Asp	Leu	Ala	Leu	Gln	Gly	Phe	Ile	Ser	Thr	Leu
65				70					75					80	
Ser	Asn	Ile	Gly	Leu	Lys	Val	Leu	Leu	Phe	Val	Ser	Val	Ala	Ser	Met
			85					90					95		
Ile	Gly	Ile	Glu	Thr	Thr	Ser	Phe	Val	Ala	Asp	Ile	Gly	Ala		
			100					105					110		

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
60
gcatcgatga tgagtttgct cgcctgggca acacctagca gcaatggcat cgatagtccc
120
tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
180
gtcaacagac cgtcaccgtg gttgacgac tcgccgggtg aggcgtcctt gacgacgac
240
tgcccaacgcg ccagggaata catctcccca tccacccaaa agaacgcccc caagctgggc
300
atcttggcca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c
351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met	Pro	Ser	Leu	Gly	Ala	Phe	Phe	Trp	Val	Asp	Gly	Glu	Met	Tyr	Ser
1			5					10					15		
Leu	Ala	Arg	Gly	Gln	Ile	Val	Val	Lys	Asp	Ala	Ser	Thr	Gly	Glu	Ile

20 25 30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
35 40 45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
50 55 60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
65 70 75 80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
85 90 95
His Arg Pro Arg
100

<210> 1265
<211> 318
<212> DNA
<213> Homo sapiens

<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttggataac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

<210> 1266
<211> 99
<212> PRT
<213> Homo sapiens

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1 5 10 15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
20 25 30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
35 40 45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
50 55 60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65 70 75 80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
85 90 95
Ser Arg Arg

<210> 1267
<211> 343

<212> DNA

<213> Homo sapiens

<400> 1267

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
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 ggaactgtcc cacggcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
 120
 aacctgtgtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccctt gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
 240
 gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttggtgcag
 300
 catggtagga agagcaccaa gtccctggact ctgttgattt ata
 343

<210> 1268

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1268

Met	Pro	His	Ser	Leu	Cys	Phe	Tyr	Ser	Pro	Cys	Glu	His	Leu	Trp	Glu
1				5				10					15		
Leu	Ser	His	Gly	Pro	Cys	Phe	Cys	Ala	Pro	Ala	Asp	Thr	Arg	Gly	Lys
		20						25					30		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Val	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		35						40					45		
Cys	Pro	Thr	Thr	Cys	Val	Phe	Ile	Pro	Leu	Val	Asn	Thr	Arg	Gly	Lys
		50						55					60		
Cys	Pro	Met	Ala	Arg	Val	Ser	Val	His	Leu	Arg	Ile	Leu	Ile	Lys	His
65					70				75					80	
Gln	Ala	Val	Ile	Gly	Asp	Arg	Val	Ser	Ser	Gly	Cys	Trp	Cys	Ser	Met
				85					90					95	
Val	Gly	Arg	Ala	Pro	Ser	Pro	Gly	Leu	Cys						
			100					105							

<210> 1269

<211> 391

<212> DNA

<213> Homo sapiens

<400> 1269

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
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 ggacgccgac ctggagccgg ccgccctaga cgggctgac gtccaggtgg ggtccccccg
 120
 cggcgccggac tacgacaccg tgtccgaaac ctttggtctt tcgccacaat tctgcagcca
 180
 gacctggggc gcacggccgg ttcaccgcaa cggtgatcct ggcagcggcc atggcggtgt
 240
 ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttgggtga ggcggaacaat ccctttcatc atgagcaatt ccgggagaat ggcgggcccgc
 360
 acggggaaga gggttggatc ggcattggcct c
 391

<210> 1270

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1270

Met	Met	Lys	Gly	Ile	Val	Arg	Leu	Thr	Gln	Pro	Pro	Glu	Val	Arg	Ile
1				5					10					15	
Leu	His	Ala	His	Glu	Ala	Ser	His	Pro	Pro	Arg	Glu	Ala	Ala	Gly	His
		20						25					30		
Arg	His	Gly	Arg	Cys	Gln	Asp	His	Arg	Cys	Gly	Glu	Pro	Ala	Val	Arg
		35					40					45			
Pro	Arg	Ser	Gly	Cys	Arg	Ile	Val	Ala	Lys	Asp	Gln	Arg	Phe	Arg	Thr
		50				55					60				
Arg	Cys	Arg	Ser	Pro	Arg	Arg	Gly	Gly	Thr	Pro	Pro	Gly	Arg	Ser	Ala
65					70				75					80	
Arg	Leu	Gly	Arg	Pro	Ala	Pro	Gly	Arg	Arg	Pro	Ala	Met	Arg	Pro	Ala
				85					90					95	
Gly	Arg	Arg	Gln	Pro	Ser	Ala	Ala	Pro	Ile	Ala	Pro	Asp	Arg		
				100					105					110	

<210> 1271

<211> 661

<212> DNA

<213> Homo sapiens

<400> 1271

acgcgtcgtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga
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 accagaaagc gtcattcggg tggatgaacga gaacgggcca tgttgtggtg ggacggataa
 120
 cccccgggtg cgtcaccata tggccacta aagagttcac cagggttgat ttaccagccc
 180
 cggtcgaccc tctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggcaaaa
 240
 tatagtcgtt aagctgggta gcatgctgc gtgccagccc ggctgagta atagcctccg
 300
 gcaaatccaa ggggaactgg gcctgacgca ggttgtgccg cagatcggtc aacgacagca
 360
 gtattctgctc agtggttcatt gtgattcttc ctggctcactc gtcaggcctg tggcggcgcc
 420
 cactgcaact cgttggtgac cggtgggtg cgacgtcgtc tgaggaatgc gggcagcttc
 480
 ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
 540
 cgggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
 600
 tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
 660

t

661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
1 5 10 15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
20 25 30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
35 40 45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
50 55 60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
65 70 75 80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
85 90 95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
100 105 110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
115 120 125

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc
60
gacaaggctg aactggatt ggtccggcat ggctgcgac gtgccgtcgt cgaagccgtt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtag
180
gttatctgcg ctcgacacat cacgagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga gggtggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
1 5 10 15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
20 25 30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
35 40 45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
50 55 60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
65 70 75 80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
85 90 95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
100 105 110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
115 120 125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
130 135 140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
145 150 155 160
Leu Thr Arg

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggagggc tgaacttctc
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gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaaggtcg atctaattgga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggtgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccgggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

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      1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115          120          125

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<210> 1277
 <211> 392
 <212> DNA
 <213> Homo sapiens

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<400> 1277
cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
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ccagtggctt tcctcagctc tgttctgcct tctctccctg ccatcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttgggaacg tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

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<210> 1278
 <211> 130
 <212> PRT
 <213> Homo sapiens

```

<400> 1278
Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
 100 105 110
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
 115 120 125
 His Asp
 130

<210> 1279
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1279
 atggagtcgc agactctccg ccacatgacg gaggacgact gcgccgacaa cggcatccca
 60
 ctccccaacg tcaactccag gatcctctct aaggatcatcg agtactgcaa cagtcacgtc
 120
 cagccgcgcg ccaaaccgcg tgactccgct gcctccgagg gcggcgagga cctcaagagc
 180
 tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc
 240
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
 297

<210> 1280
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 1280
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1 5 10 15
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
 20 25 30
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
 35 40 45
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50 55 60
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
 65 70 75 80
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
 85 90 95
 Ala Asp Met

<210> 1281
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 1281
 acgcgtgaag ggggcttttg aggggatggc ttctggactg cacgatgggt gaacacagtt
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ttttaaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg
120
tggcgtgcca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
180
gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
240
ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc
300
ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccactcaagg
360
ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcac
420
gtgggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
480
ttgcttctaa tttttaaaaa cattcaatgt gtaca
515

<210> 1282
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1282
Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe
1 5 10 15
Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala
20 25 30
Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro
35 40 45
His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys
50 55 60
Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly
65 70 75 80
Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu
85 90 95
Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu
100 105 110
Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu
115 120 125
Ser Thr Gly Leu Ile Ser Ser
130 135

<210> 1283
<211> 296
<212> DNA
<213> Homo sapiens

<400> 1283
gaattcctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc
60
tccactgcag aacttatata tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
120
gaatccccgc tggggctctt aggagggagg aaagttccca caggtaactc actggttaat
180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn
 296

<210> 1284
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1284
 Met Asn Cys Ser Val Trp Arg Thr Ser Trp Val Ala Leu Leu Arg Val
 1 5 10 15
 Ser Thr Ala Glu Leu Ile His Ile Cys Phe Val His Thr Lys Lys Asn
 20 25 30
 Ser Ser Pro Lys Glu Ser Arg Leu Gly Leu Leu Gly Gly Arg Lys Val
 35 40 45
 Pro Thr Gly Asn Ser Leu Val Asn Phe Lys Glu Leu Arg Lys Gly Arg
 50 55 60
 Lys Asp Gly Phe Phe Ser Cys Glu Ser Arg Gln Gly Pro Asp Asp Asn
 65 70 75 80
 Pro Pro Arg Ser Glu Arg Asn Phe Gln Pro Thr Ser Ala Ala
 85 90

<210> 1285
 <211> 526
 <212> DNA
 <213> Homo sapiens

<400> 1285
 gggcccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
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 gtgaaaggtc catctagagg aggtaaaaga cagggtgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttgcca
 180
 agaagcaaca aaagggatc tacacctcag accaggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctcttc
 300
 aaaccacac ttcagaggca ggctttaaaa cgctgactt ctgtcagggc cacaggctgg
 360
 gctgcccaca gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga
 420
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggcccct
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1286

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Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

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<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

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acgcgtgaag gggagaggca gctccagggtg gaggggaagtg catgaggaag cagagaggca
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ggcgacaggc agcgtggctg gggctgggca ggccttccag tttgattgca gcccagaggt
120
caggtgagaa gaaggtacaa caagcaagga agggcccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtt ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc cagggtgtct gac
333

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<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```


100

105

<210> 1289
<211> 336
<212> DNA
<213> Homo sapiens

<400> 1289
acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tggcgcagcg tgtgcatggg
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cacggcggtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
120
cctgcacggg ggaggaggca aggtggcccc tgcctgtggg cacagagccc accttccggt
180
ccagcccgag gcccttttcc cagagcccc tcccaagggg ccataccacc tgcaccccca
240
agatggcgtg gggcgccct ggtgcaggag caggggacag tcagggaggc gtgtggcgga
300
cagtagcagc cccccagccc ccctcccccc accggt
336

<210> 1290
<211> 89
<212> PRT
<213> Homo sapiens

<400> 1290
Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala
1 5 10 15
Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr
20 25 30
Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu
35 40 45
Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro
50 55 60
Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala
65 70 75 80
Ala Pro Gln Pro Pro Ser Pro His Arg
85

<210> 1291
<211> 379
<212> DNA
<213> Homo sapiens

<400> 1291
tgcccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
60
atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcacccca
120
taaactgaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
180
gtaaaccggg tttcccccaa cggataccca tcactgccat gctcggtttt ttctatccga
240

cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1292
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr
 1 5 10 15
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val
 20 25 30
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu
 35 40 45
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp
 50 55 60
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr
 65 70 75 80
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala
 85 90 95
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu
 100 105 110
 Pro Glu Gln Leu Thr Glu Val Asp Gly
 115 120

<210> 1293
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 1293
 nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
 120
 ctgcacttcg ccgcaggttt tgggcggaaa gacgtagttg aatatttgct tcagaatggt
 180
 gcaaagtgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatgggtg cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgcga
 340

<210> 1294
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

ggatcccgga gacctcgctcg gcgaacgtca cctcgtccag ggccgaggcg cggaacaccg
 60
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg
 120
 cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcgggttcg cccgacgcca
 180
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctcg
 240
 cgagctcctc cttcgcccg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc
 300
 ccacacctc gacctcgccg gagagcttcg ccccgtgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcacccgg attcccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
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gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca
120
gatacactct acaaatctcg gggcccacca caccaagaag acacggagga gccaacaaaa
180
gaaggaccat acgaaatgca cccccaagc aaccaaccaa tccaagaaaa aatacgtctc
240
agggttctgt gggccctctt gcatgggctg cctgcccc ctgttctggc ctggctcaag
300
caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10					15	
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
		35					40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55					60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
			85						90						

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctgggtg
60
gttggtggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttcctg
120
tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
180
gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggcctgtgc
240
cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct
300
tccttag
307

<210> 1300
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1300
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1 5 10 15
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20 25 30
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35 40 45
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50 55 60
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65 70 75 80
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
 85 90

<210> 1301
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 1301
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
 60
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
 120
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
 180
 atcatgtttg aaggcgcgca agggctcttg ttggatgttg atcatggtac ttaccctgat
 240
 gtgacttcat ctaatacgac tgcgggcgga gcgccagcgg gaacagggtt tggtcctttg
 300
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttgg ttctggacct
 360
 ttccctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt
 408

<210> 1302
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1302
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1 5 10 15
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20 25 30
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35 40 45
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65			70				75				80				
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
		85					90				95				
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
		100					105				110				
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120				125				
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130						135									

<210> 1303

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 1303

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gccggggggg ggatgctatc taacatcttc atgttcaacc cagagaagaa acatcccggc
60
gtttgccctg gggccctctc atcccacatc attttttcaa cccttcccca ncctttcnga
120
aataggggcca accccttaaa aancaaatnt tcanataaac ccttttcctt ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca cccagctcag
300
ctggcacaaa aatactgcca ccacaccttc accctgccta gccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg cccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcctgggcgt cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agcccttcc caggctgggt
600
ccctgccggc atctcccaca ggccaggact ggccacccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttcctc tttcttgtct
720
gggggctcaa gaatccagac gccacctcc cggagcgagc accaagacag gaagccaacc
780
tgcaatgcc agccactgc gaccacagg ctctgccggg gtctgccgg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctcctata gggacgggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
1020
tggateccac gcgtggc
1037

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<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser
 1 5 10 15
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20 25 30
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
 nacgcgttct gcgaggccat gcgggtctat gcccgcggc cgttgacctc gccacactc
 60
 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc
 120
 ccgcgctctc aggggtgctta tgcgatgcg gacggtcact gggtttcagg tactttcgac
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 360
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 480
 cagcaccgg agtggttcac gaccgcgtt gatggcacca tcgcctatgc agaaaattca
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gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt
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 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
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 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
 245 250 255
 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1307
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atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca
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 catgttcagt cccacaccct gagggcaagg caccocgagt ccctgaggga gcaaggccct
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 300
 taggctaacg agaagccagg gcctccctcc ccactgggct ttccacaaaa acctgactaa
 360
 tgtccaggga cagccaaagg ccttgaggct agctgggtgg aacacctttc ccctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
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 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gccaagacc
 600
 tcccccaacc ttggtctgac gcgt
 624

<210> 1308
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1308
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 His Ala Ala Thr Ala Trp Gly Cys Arg Ala Leu Leu Gly Ala Val Cys
 20 25 30
 Leu Cys Ser Gly Ser Leu Gly Trp Gln Gly Leu Ala Pro Ser Gly Thr
 35 40 45
 Arg Gly Ala Leu Ala Ser Gly Cys Gly Thr Glu His Val Glu Trp Leu
 50 55 60
 Trp Ser Ser Thr Ala Gln Ala Gln Gly Pro Asp Arg Met Cys Pro Ala
 65 70 75 80
 Ser Leu Thr Ser Pro Glu Val Gly Cys Arg Glu Pro Gly Ala Trp His
 85 90 95
 Ser Pro Pro Ala
 100

<210> 1309
 <211> 563
 <212> DNA
 <213> Homo sapiens

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 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgctca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
 ggtacacgca acttcggtga aaccttgctg ccgttcaaga aagggtgcgtt ccagatggcg
 300
 attgccgcag gtgtgccgat cgtgcagggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
 ctcaatcggtt gggacagtgg cgatatatttta attcgctcgt tgccgccaat tcctacgacc
 420
 ggactgacgt tggatgacat gccacgggtg atggagacct gccgtcaaca aatgcgcgag
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 tgcattgagg caatggaccg cgagctggaa atcgtccctt gtaggaacga attggctcgc
 540
 gaagggcggtt aacgactacg cgt
 563

<210> 1310
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 1310
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 Thr Gly Val Pro Tyr Arg Thr Val Cys Ile Gly Lys Lys Ser Leu Lys
 20 25 30
 Trp Val Pro Leu Phe Gly Gln Leu Phe Trp Leu Ala Gly Asn Val Leu
 35 40 45
 Ile Asp Arg Gly Asn Ala His Lys Ala Arg Arg Ser Met Leu Thr Thr
 50 55 60
 Thr His Thr Leu Gln His Lys Asp Thr Ser Ile Trp Val Phe Ala Glu
 65 70 75 80
 Gly Thr Arg Asn Phe Gly Glu Thr Leu Leu Pro Phe Lys Lys Gly Ala
 85 90 95
 Phe Gln Met Ala Ile Ala Ala Gly Val Pro Ile Val Gln Val Cys Val
 100 105 110
 Ser Thr Tyr Val Lys His Met Lys Leu Asn Arg Trp Asp Ser Gly Asp
 115 120 125
 Ile Leu Ile Arg Ser Leu Pro Pro Ile Pro Thr Thr Gly Leu Thr Leu
 130 135 140
 Asp Asp Met Pro Arg Leu Met Glu Thr Cys Arg Gln Gln Met Arg Glu
 145 150 155 160
 Cys Ile Glu Ala Met Asp Arg Glu Leu Glu Ile Val Pro Cys Arg Asn
 165 170 175
 Glu Leu Ala Arg Glu Gly Arg
 180

<210> 1311
 <211> 674
 <212> DNA
 <213> Homo sapiens

<400> 1311
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 60

tccagggccg acccggcaca caccgtcggg ctgacggatg atctgagctg ggtcaagcgc
 120
 atctcccggc cgccgaaagc cggaatacca cgaggcgetg gatcggcgat tctgttcaca
 180
 gggctgaccc ccgatcagga tcgactgacc aacgagtggg cgcagggcgca cgggttgggg
 240
 gaattttatg tcatggcccc ccgaatcctc ggtgatgtcc cgctgccaac gatcaccatc
 300
 gtcgcgaccg tcaccttcat cgtgttgctg gccatcatgg cgggcctggt ggcgaaggag
 360
 gagagagccg ccaacagtga tctggtgacc agcctcaaac gcatcggatt gggcaggcgt
 420
 tgggtggacc aggtcatcct tgtggaggtg gctaccacaa tgctggccgc cctgatatgc
 480
 ggggtgatct cctcggttgt cgcggtgtgg ctcacaggca ggatcctgtc gggagccttg
 540
 gacctgcttg gggccgctg gtgggtcttc ggtgcgttgg ccgccgggat gttcggtgga
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 660
 acgaccccggt gaca
 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

Met	Asp	Gly	Gly	Pro	Gln	Gln	Gly	Ser	Thr	Glu	His	Pro	Gly	Gly	Gln	1	5	10	15
Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg	20	25	30	
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro	35	40	45	
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp	50	55	60	
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His	65	70	75	80
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His	85	90	95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg	100	105	110	
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe	115	120	125	
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile	130	135	140	
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr	145	150	155	160
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile	165	170	175	
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly	180	185	190	
Gln	Val	Pro	Ala																

195

<210> 1313
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1313
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 120
 aaggaagggga gaggacagag cctggtgtga ctctggggtt tctggtgtgt atagctggtg
 180
 gacagtgggtg tctttgcca gaggggagcc ctggaagagg agaggtttgc agggcaggtg
 240
 ctgagtccgg ttttggacac gctgaatttg aggtatctgt cagatatgag acccaaaagg
 300
 tgagggcggg gaagtggatg tgcaggccct gagctctggg aggggtctgg gtatgctgtg
 360
 gtcatga
 367

<210> 1314
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1314
 Met Thr Thr Ala Tyr Pro Asp Pro Ser Gln Ser Ser Gly Pro Ala His
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 Pro Leu Pro Arg Pro His Leu Leu Gly Leu Ile Ser Asp Arg Tyr Leu
 20 25 30
 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu
 35 40 45
 Ser Ser Ser Arg Ala Pro Leu Leu Ala Lys Thr Pro Leu Ser Thr Ser
 50 55 60
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro
 65 70 75 80
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro
 85 90 95
 Thr Leu Ala Ala Thr Thr Ala Ala Ala Pro Ala Ala Pro Pro Ala Pro
 100 105 110
 Ala Thr Trp Arg Gly Cys Met Asp Ile
 115 120

<210> 1315
 <211> 5245
 <212> DNA
 <213> Homo sapiens

<400> 1315
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gacatggatg atgcatctaa gcttcttcag gattatgata ttcgaactgg caacaccagg
120
gaagctttga gtccttgccc aagtactgta agtaccaagt ctcagccagg cagcagtgct
180
tcttctagtt ctggagttaa aatgaccagc tttgctgaac aaaaattcag gaaactgaat
240
cataccgatg gaaaaagtag tgggaagcagt tctcaaaaaa ctacaccaga aggctctgaa
300
cttaatatcc ctcagtgggt tgcttgggca caaattccag aagaaacagg gcttccacag
360
ggacgggaca ctaccagct gttggcctct gaaatgggtgc atcttaggat gaaactagaa
420
gaaaagaggc gtgctataga agcccagaaa aagaaaatgg aagctgcttt taccaaacag
480
agacagaaaa tgggaaggac agcattcctt actgtagtga aaaagaaagg ggatgggata
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600
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660
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720
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780
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840
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1680

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 5220
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 5245

<210> 1316
 <211> 856
 <212> PRT
 <213> Homo sapiens

<400> 1316
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 Gly Asn Thr Arg Glu Ala Leu Ser Pro Cys Pro Ser Thr Val Ser Thr
 35 40 45
 Lys Ser Gln Pro Gly Ser Ser Ala Ser Ser Ser Ser Gly Val Lys Met
 50 55 60
 Thr Ser Phe Ala Glu Gln Lys Phe Arg Lys Leu Asn His Thr Asp Gly
 65 70 75 80
 Lys Ser Ser Gly Ser Ser Ser Gln Lys Thr Thr Pro Glu Gly Ser Glu
 85 90 95
 Leu Asn Ile Pro His Val Val Ala Trp Ala Gln Ile Pro Glu Glu Thr
 100 105 110
 Gly Leu Pro Gln Gly Arg Asp Thr Thr Gln Leu Leu Ala Ser Glu Met
 115 120 125
 Val His Leu Arg Met Lys Leu Glu Glu Lys Arg Arg Ala Ile Glu Ala
 130 135 140
 Gln Lys Lys Lys Met Glu Ala Ala Phe Thr Lys Gln Arg Gln Lys Met
 145 150 155 160
 Gly Arg Thr Ala Phe Leu Thr Val Val Lys Lys Lys Gly Asp Gly Ile
 165 170 175
 Ser Pro Leu Arg Glu Glu Ala Ala Gly Ala Glu Asp Glu Lys Val Tyr
 180 185 190
 Thr Asp Arg Ala Lys Glu Lys Glu Ser Gln Lys Thr Asp Gly Gln Arg
 195 200 205
 Ser Lys Ser Leu Ala Asp Ile Lys Glu Ser Met Glu Asn Pro Gln Ala
 210 215 220
 Lys Trp Leu Lys Ser Pro Thr Thr Pro Ile Asp Pro Glu Lys Gln Trp
 225 230 235 240
 Asn Leu Ala Ser Pro Ser Glu Glu Thr Leu Asn Glu Gly Glu Ile Leu
 245 250 255
 Glu Tyr Thr Lys Ser Ile Glu Lys Leu Asn Ser Ser Leu His Phe Leu
 260 265 270
 Gln Gln Glu Met Gln Arg Leu Ser Leu Gln Gln Glu Met Leu Met Gln

275	280	285
Met Arg Glu Gln Gln Ser Trp Val Ile Ser Pro Pro Gln Pro Ser Pro		
290	295	300
Gln Lys Gln Ile Arg Asp Phe Lys Pro Ser Lys Gln Ala Gly Leu Ser		
305	310	315
Ser Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro		
325	330	335
Ser Pro Gln Ser Ser Asn Arg Lys Ser Ala Ser Phe Ser Val Lys Ser		
340	345	350
Gln Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg		
355	360	365
Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg		
370	375	380
Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe		
385	390	395
Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu		
405	410	415
Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly		
420	425	430
His Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser		
435	440	445
Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn		
450	455	460
Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe		
465	470	475
Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser		
485	490	495
Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp		
500	505	510
Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys		
515	520	525
Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met		
530	535	540
Lys Arg Ala Ala Leu Leu Glu Lys Arg Leu Arg Arg Glu Lys Glu Thr		
545	550	555
Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu		
565	570	575
Glu Thr Arg Arg Lys Thr Glu Glu Glu Arg Gln Lys Lys Glu Asp Glu		
580	585	590
Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln		
595	600	605
Leu Lys Leu Met Glu Asp Met Asp Thr Val Ile Lys Pro Arg Pro Gln		
610	615	620
Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His		
625	630	635
Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu		
645	650	655
Ser Leu Ala Ser Leu Asn Thr Gly Asp Asn Glu Ser Val His Ser Gly		
660	665	670
Lys Arg Thr Pro Arg Ser Glu Ser Val Glu Gly Phe Leu Ser Pro Ser		
675	680	685
Arg Cys Gly Ser Arg Asn Gly Glu Lys Asp Trp Glu Asn Ala Ser Thr		
690	695	700
Thr Ser Ser Val Ala Ser Gly Thr Glu Tyr Thr Gly Pro Lys Leu Tyr		

705		710		715		720									
Lys	Glu	Pro	Ser	Ala	Lys	Ser	Asn	Lys	His	Ile	Ile	Gln	Asn	Ala	Leu
				725				730						735	
Ala	His	Cys	Cys	Leu	Ala	Gly	Lys	Val	Asn	Glu	Gly	Gln	Lys	Lys	Lys
			740					745						750	
Ile	Leu	Glu	Glu	Met	Glu	Lys	Ser	Asp	Ala	Asn	Asn	Phe	Leu	Ile	Leu
		755						760					765		
Phe	Arg	Asp	Ser	Gly	Cys	Gln	Phe	Arg	Ser	Leu	Tyr	Thr	Tyr	Cys	Pro
	770					775					780				
Glu	Thr	Glu	Glu	Ile	Asn	Lys	Leu	Thr	Gly	Ile	Gly	Pro	Lys	Ser	Ile
785					790					795					800
Thr	Lys	Lys	Met	Ile	Glu	Gly	Leu	Tyr	Lys	Tyr	Asn	Ser	Asp	Arg	Lys
				805						810				815	
Gln	Phe	Ser	His	Ile	Pro	Ala	Lys	Thr	Leu	Ser	Ala	Ser	Val	Asp	Ala
			820						825					830	
Ile	Thr	Ile	His	Ser	His	Leu	Trp	Gln	Thr	Lys	Arg	Pro	Val	Thr	Pro
		835					840						845		
Lys	Lys	Leu	Leu	Pro	Thr	Lys	Ala								
	850						855								

<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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ncggccgagg gcattcacct caacatggca gcaggcagcg gtgtccccgg cagtggactg
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120
gagggtagcc agcctagcac catggacgcc accgcagtag caggcatcga gaccaagaaa
180
gagaaggagg acctgtgctt gctaaagaag gaggagaagg aggagccagt agccccggag
240
ctggcaacaa cggtgccctga gagcgcagag cctgaggcag aggcggacgg ggaggagctg
300
gacggcagcg acatgtcagc catcatctat gaaatcccca aggagcctga gaagaggcgg
360
cggagcaagc ggtcgcgggg gatggatgct gacggcctgc tcgagatgtt cactgcccc
420
tacgaggggt gcagccaagt ctacgtggcc ctcagcagct tccagaacca cgtcaatctt
480
gtgcatcgga aaggaaagac caaagtgtgc cctcatcctg gctgtggcaa gaagttctat
540
ttatccaacc acctgcggcg gcacatgatc atccattcag gtgtccgtga attcacctgc
600
gagacctgcg gcaagtcctt caagaggaag aaccacctgg aggtacatcg gcgcacccac
660
accggcgaga ccccccctgca gtgcgtgatc tgtggctacc agtgccggca gcgcgcgtcg
720
ctcaactggc acatgaagaa gcacactgcg gaggtgcagt acaacttcac gtgcgatgcc
780
tgcgggaagc gcttcgagaa gctggacagc gtcaagttcc acacgtcaa aagccaccg
840

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gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctatttattc gtccgctcgg
 900
 acaccacagc ccgggcttgc cggggcctgg acagctgcga gggccggccg gaccgcgggc
 960
 cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcaggtt cccacccccg
 1020
 cccaccgca tccttctcgg agctggtgcc tggggctgca ttgctggaac tgtgtcaaga
 1080
 gagcagagtg agattaaaga gcgagaaagg aaaaaaaaaa aaa
 1123

<210> 1318
 <211> 285
 <212> PRT
 <213> Homo sapiens

<400> 1318
 Xaa Ala Glu Gly Ile His Leu Asn Met Ala Ala Gly Ser Gly Val Pro
 1 5 10 15
 Gly Ser Gly Leu Gly Glu Glu Val Pro Cys Ala Met Met Glu Gly Val
 20 25 30
 Ala Ala Tyr Thr Gln Thr Glu Pro Glu Gly Ser Gln Pro Ser Thr Met
 35 40 45
 Asp Ala Thr Ala Val Ala Gly Ile Glu Thr Lys Lys Glu Lys Glu Asp
 50 55 60
 Leu Cys Leu Leu Lys Lys Glu Glu Lys Glu Glu Pro Val Ala Pro Glu
 65 70 75 80
 Leu Ala Thr Thr Val Pro Glu Ser Ala Glu Pro Glu Ala Glu Ala Asp
 85 90 95
 Gly Glu Glu Leu Asp Gly Ser Asp Met Ser Ala Ile Ile Tyr Glu Ile
 100 105 110
 Pro Lys Glu Pro Glu Lys Arg Arg Arg Ser Lys Arg Ser Arg Val Met
 115 120 125
 Asp Ala Asp Gly Leu Leu Glu Met Phe His Cys Pro Tyr Glu Gly Cys
 130 135 140
 Ser Gln Val Tyr Val Ala Leu Ser Ser Phe Gln Asn His Val Asn Leu
 145 150 155 160
 Val His Arg Lys Gly Lys Thr Lys Val Cys Pro His Pro Gly Cys Gly
 165 170 175
 Lys Lys Phe Tyr Leu Ser Asn His Leu Arg Arg His Met Ile Ile His
 180 185 190
 Ser Gly Val Arg Glu Phe Thr Cys Glu Thr Cys Gly Lys Ser Phe Lys
 195 200 205
 Arg Lys Asn His Leu Glu Val His Arg Arg Thr His Thr Gly Glu Thr
 210 215 220
 Pro Leu Gln Cys Val Ile Cys Gly Tyr Gln Cys Arg Gln Arg Ala Ser
 225 230 235 240
 Leu Asn Trp His Met Lys Lys His Thr Ala Glu Val Gln Tyr Asn Phe
 245 250 255
 Thr Cys Asp Ala Cys Gly Lys Arg Phe Glu Lys Leu Asp Ser Val Lys
 260 265 270
 Phe His Thr Leu Lys Ser His Pro Asp His Lys Pro Thr
 275 280 285

<210> 1319
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 1319
 cgggagcggg gccagctct tggctggtga tgagggcctg gaagcagatg gcctctcagt
 60
 cctccatttg ggaggactcc caaaatagtg caggctcgag ggggtgggga atggctcctg
 120
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttctctt gggagctccg tgggagagt
 180
 gagtcgatgc caagtcagag agcagttggg gaggaacca gaagccctgg gatggtgtct
 240
 gcatgggaat gtgtaggag gcagccacaa tgggcctggg ccttccttct tctccttct
 300
 gtccccctcc cccatcccc tctctctctc ctctctctct gaaaccctg actgggggaa
 360
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag
 420
 tttgcctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat
 480
 gtatggttgt gtgtgcatgg ggggtggggga ttctgacctg gggtcactcc caaagctt
 538

<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1320
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp
 1 5 10 15
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu
 20 25 30
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp
 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
 130 135 140
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly
 145 150 155 160
 Ile Leu Thr Trp Gly His Ser Gln Ser
 165

<210> 1321
<211> 1292
<212> DNA
<213> Homo sapiens

<400> 1321
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cggaacgcag caatgatccg gcgtcagtgc tctcagtcac cgcaggatga cccggtgcaa
120
cgcccggtac gctcacggta cgcaacgacg aagcagggat cgctcagacc cgggcacgtc
180
atcgtcaaga agatttaca caacaatgtc cttctcggcg tcaacgggtc ggggaccgaa
240
atggtcgtca atgctcgcgg tatcgccctac ggacgacacc gcggggagat cgtcgatgcc
300
tcgtcggccc agcgatatgt cgcagagggg gcctatcgca cgaccgccat cgcactactg
360
ctaacgaacg ccactcacac cgaggtgcga gtggcacagg caatcgtcga attggcgcgc
420
gaagagctgg gcaactccca tgcccgacgg atgatgctgc ccactcctga tcacctcgtc
480
gcagctgtgc accgagctaa gcagggggcc gtcactgatt tccccctgga atgggaagtc
540
cgtcagctct atcccgatga ggccggaactg ggccgacgcg ctgtcgaaat cgtcgacggt
600
gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat
660
cagcgggtggg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac
720
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca
780
tcccgtttcg tcaccacact tcgctatctg ttcgctcggg cctcggacaa caagcagctc
840
tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg
900
gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgacct gacggaagcc
960
gaaatcaact acatgcctt acacaccacc cggctctaca acgaggtgat ggggatggat
1020
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat
1080
gaccttctg ccggaaagcc agcaccaaag tcaccagat caaaattcag atgcgtgcct
1140
aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtggt ggggtggggg
1200
ggggggggtt gcatgctcag ggggtggggg tttgttgaag ccatcatgaa gttgcaaacc
1260
caggactgtt ccactagtaa agccctgcc tt
1292

<210> 1322
<211> 317
<212> PRT

<213> Homo sapiens

<400> 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
      65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
      145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
      225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
      305          310          315

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<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

```

cgcgatgatgg gaatgcgtca ctatgatgtt cagttgattg gtggtatcac tctgcacgaa
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ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

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tacctcaatg cattgagtgg tcagggtgtg catgtcatca ccgtcaatga ctatcttgca
180
caacgtgatg ctgaactcaa ccgcccata tttgagtttt tgggtttaag catcgggtgtg
240
atattattcga tgcaaagcc tgctgagaaa gcacaagctt atttagcaga cattacttac
300
ggtacc
306

<210> 1324
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1324
Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile
1 5 10 15
Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys
20 25 30
Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln
35 40 45
Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
50 55 60
Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
65 70 75 80
Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
85 90 95
Asp Ile Thr Tyr Gly Thr
100

<210> 1325
<211> 391
<212> DNA
<213> Homo sapiens

<400> 1325
gtgcacatgg gccactggc gaatccgacg cgcggcctac ggcgcgcaat actggcggcc
60
attgtcgccg catgttccgt ctccgctcat gccggaagct ggccagagaa accgatcacg
120
atggtcgtgc cgtttcccg cggaggcggc accgatctcg tggcgcgctc gatccagccg
180
cttttgcagc gcgaactcgg acaaccggtg gtgatcgaca accgcagcgg cgcaggcggc
240
acgctcggct ccagcttcgt ggcgcggggc gttgccgacg gctacacggc tggcgtggtc
300
accacgagca cccacgcggc aagcgtcgcg ctctatcccc ggctggccta caaccgaca
360
gcggactttg catacgccgg cttcatcggc n
391

<210> 1326
<211> 130
<212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115          120          125
Ile Gly
      130

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<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga ttccggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
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tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaattgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcgt gcatcgaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

```

Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```


50	55	60
Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala		
65	70	75
Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg		80
	85	90
Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly		95
100	105	

<210> 1329
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 1329
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 60
 ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc
 120
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc
 180
 tctgcaatgc aagctgggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
 240
 gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtga
 300
 ggtgaggggg attttggtat ctctttttat aaccctgttt ctaagaaacg tgattggcag
 360
 cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
 420
 ggtcgtcagt tgacgcgt
 438

<210> 1330
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1330
Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
1 5 10 15
Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
20 25 30
Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
35 40 45
Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
50 55 60
Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
65 70 75 80
Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
85 90 95
Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
100 105 110
Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
115 120 125
Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

130 135 140
 Thr Arg
 145

<210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 1331
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 catcttctgg ccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcggtgggta cgaacgtcac cccgatactc ggccccatcc tcgacggacg gctggcaggg
 180
 aacgaagtca ttcgggacac cgacaagggc aatcgacggc gacccactca cgaccgcgcc
 240
 gtcggggccga tgcagttcat tccggccacc tgggcccgat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaactg atc
 453

<210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
<211> 540
<212> DNA
<213> Homo sapiens

<400> 1333
acgcgtcgcc cacactgttg ccgccgaggc ggctcgagcc ggggtgtgagg aaggatccgc
60
ggcacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcggcgg aggcacccgc
120
gcgaagggct aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt
180
cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
240
agtacacggc cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga
300
tacaatgatg aggtgtctaa gtattttccg gtccaccgga agaaccgca gcagcgttct
360
ctcaatcaga tcgtcgacat cctgcacatc ggccggtctta tcgcctaccc gacagacacg
420
ggttatgcct tcggtgcccc gntaggggaat aaggatgccg tggaccggat tcgcaaactt
480
cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc
540

<210> 1334
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1334
Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
1 5 10 15
Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
20 25 30
Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
35 40 45
Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
50 55 60
Gln Phe Ala Gln Val Gly
65 70

<210> 1335
<211> 748
<212> DNA
<213> Homo sapiens

<400> 1335
nctctcatac tttttttccc tattectatc cccctctct cgcaccgcgt gaagcgttct
60
gtgaatgccg agaagaagcg tcgtgaggtc ctcatcagg cctccgggta ccgtggtcag
120
cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcgttc
180

cgtgaccgtc gtgctaagaa ggggtgacttc cgctcgctgt ggatccagcg catcaatgct
240
gcttcccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
300
gtcgaggctg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac
360
agcctggctg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
420
gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg
480
ttcggcccgt cgtctttcat ctccggcggg acgcgatgag tccgggctgt tottggtaga
540
aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggcaac
600
ctcggacca gctcgcatg ctgagcatgt cgaggtggct acatgctg gcttcgggt
660
cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
720
cttcgcggtg tgcggcagg ttacgcgt
748

<210> 1336
<211> 136
<212> PRT
<213> Homo sapiens

<400> 1336
Xaa Leu Ile Leu Phe Phe Pro Ile Pro Ile Pro Pro Leu Ser Asp Arg
1 5 10 15
Val Lys Arg Ser Val Asn Ala Lys Lys Lys Arg Arg Glu Val Leu Asp
20 25 30
Gln Ala Ser Gly Tyr Arg Gly Gln Arg Ser Arg Leu Tyr Arg Lys Ala
35 40 45
Lys Glu Gln Thr Leu His Ser Ala Thr Tyr Ser Phe Arg Asp Arg Arg
50 55 60
Ala Lys Lys Gly Asp Phe Arg Ser Leu Trp Ile Gln Arg Ile Asn Ala
65 70 75 80
Ala Ser Arg Ala Gln Gly Met Thr Tyr Asn Arg Phe Ile Asn Gly Leu
85 90 95
Lys Asn Ala Gly Val Glu Val Asp Arg Lys Met Leu Ala Glu Leu Ala
100 105 110
Val Ser Asp Ile Asn Ala Phe Asn Ser Leu Val Glu Val Ala Lys Ala
115 120 125
Ser Gln Pro Gln Asn Ala Ala Ala
130 135

<210> 1337
<211> 364
<212> DNA
<213> Homo sapiens

<400> 1337
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 120
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgct gtatgagact acaggggttc
 180
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggcactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc
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 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg
 360
 gccc
 364

<210> 1338
 <211> 96
 <212> .PRT
 <213> Homo sapiens

<400> 1338
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala
 1 5 10 15
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu
 20 25 30
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu
 35 40 45
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu
 50 55 60
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr
 65 70 75 80
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala
 85 90 95

<210> 1339
 <211> 653
 <212> DNA
 <213> Homo sapiens

<400> 1339
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 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
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 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggccgtgag attataccta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgac gtggcacggc gatcgcggcc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gacgccccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccagggagtt
 480

gacgccggta tcgacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggcccg ccagccctac tccggcgatc tgggtcttcac cgccttctcc
 600
 ggttcccacc aggacgccat caagaagggt ctggaagacc tggcccggcg cgc
 653

<210> 1340
 <211> 217
 <212> PRT
 <213> Homo sapiens

<400> 1340
 Arg Val Val Phe Asn Ile Asp Glu Lys Gln Cys Ile Asp Leu Ala His
 1 5 10 15
 Arg Gly Thr Glu Trp Val Val Arg Tyr Ala Asp Lys Tyr Leu Gly Asp
 20 25 30
 Val Glu Phe Gly Tyr Glu Tyr Ser Pro Glu Met Phe Ser Gln Thr Arg
 35 40 45
 Thr Asp Phe Ala Ile Asp Val Cys His Ser Val Met Asp Val Trp Gln
 50 55 60
 Pro Gly Pro Gly Arg Glu Ile Ile Leu Asn Leu Pro Ala Thr Val Glu
 65 70 75 80
 Met Ser Thr Pro Asn Thr Tyr Ala Asp Gln Ile Glu Tyr Phe Cys Arg
 85 90 95
 Asn Ile Arg Asp Arg Glu His Val Cys Val Ser Leu His Pro His Asn
 100 105 110
 Asp Arg Gly Thr Ala Ile Ala Ala Glu Phe Ala Gln Met Ala Gly
 115 120 125
 Ala Asp Arg Val Glu Gly Cys Phe Phe Gly Pro Gly Glu Arg Pro Gly
 130 135 140
 Thr Val Asp Leu Val Thr Leu Gly Met Asn Leu Val Ser Gln Gly Val
 145 150 155 160
 Asp Ala Gly Ile Asp Phe Ser Asp Met Pro Lys Ile Arg Arg Thr Val
 165 170 175
 Glu Tyr Cys Thr Cys Leu Pro Val Pro Ala Arg Gln Pro Tyr Ser Gly
 180 185 190
 Asp Leu Val Phe Thr Ala Phe Ser Gly Ser His Gln Asp Ala Ile Lys
 195 200 205
 Lys Gly Leu Glu Asp Leu Ala Arg Arg
 210 215

<210> 1341
 <211> 666
 <212> DNA
 <213> Homo sapiens

<400> 1341
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 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccggtggt taatggatca
 420
 caagccccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgctcgtcgt gccactccc caggatacct cgtaagcga caaacagagg atgtgcagat
 540
 gtcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggg ctgttggtga
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 gctagc
 666

<210> 1342
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1342
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 1 5 10 15
 His Ile Phe Thr Thr Gly Phe Pro Thr Glu Val Trp Gln Ser Val Ile
 20 25 30
 Glu Lys Leu Ala Lys Lys Gly Leu Trp His Ser Phe Leu Leu Ser
 35 40 45
 Ala Lys Lys Asp Arg Leu Pro Arg Asn Ile His Val Pro Glu Leu Ser
 50 55 60
 Leu Lys Ser Leu Phe Glu Lys Tyr Val Phe Ile Gly Leu Tyr Glu Lys
 65 70 75 80
 Met Glu Gln Val Pro Lys Leu Val Gln Trp Leu Ile Ser Ile Gly Ala
 85 90 95
 Ser Val Glu Thr Ile Gly Pro Tyr Pro Leu His Ala Leu Met Arg Leu
 100 105 110
 Cys Ile Gln Ala Arg Glu Asn His Leu Phe Arg Trp Leu Met Asp His
 115 120 125
 Lys Pro Glu Trp Lys Gly Arg Ile Asn Gln Lys Asp Gly Asp Gly Cys
 130 135 140
 Thr Val Leu His Val Val Ala Ala His Ser Pro Gly Tyr Leu Val Lys
 145 150 155 160
 Arg Gln Thr Glu Asp Val Gln Met Leu Leu Arg Phe Gly Ala Asp Pro
 165 170 175
 Thr Leu Leu Asp Arg Gln Ser Arg Ser Val Val Asp Val Leu Lys Arg
 180 185 190
 Asn Lys Asn Phe Lys Ala Ile Glu Lys Ile Asn Ser His Leu Glu Lys
 195 200 205
 Leu

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
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 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt
 120
 ttaaaatttt tcctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
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 atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
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 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
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 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
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 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg gggttgagac cgactcgtgt atcgccatt gc
402

<210> 1346
<211> 134
<212> PRT
<213> Homo sapiens

<400> 1346
Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
1 5 10 15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
20 25 30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
35 40 45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
50 55 60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
65 70 75 80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
85 90 95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
100 105 110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
115 120 125
Ser Cys Ile Ala His Cys
130

<210> 1347
<211> 415
<212> DNA
<213> Homo sapiens

<400> 1347
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120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgcctg aggcagggga aggggcacgc tttctgaaaa
240
accccccaa accgattcca ggaagcccaa agggcgggccc ctctgcccgc agcactgcct
300
tcacgtttac ttccatcccg gcctcctcct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc acccttttatt taagactcct attatctgca cacaatggaa gttag
415

<210> 1348
<211> 105
<212> PRT
<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
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          20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
          35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
          50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
          85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
          100           105

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<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccggtcac cgtaaagccg
120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttcctcag
180
gccgtcgcca acgcctatgc ctatgacgac atggtttag tagaggaatt cattgtgggc
240
aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagccgct
300
gagattcgcc ctgtcggtagg tgtttatgat tattcagcga tgtacaccgg tggtagaca
360
cgactaacag ctctgcaga cattagcgat acggcgcccc aaaccgacgac ggcgatggcc
420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
480
gagtcgggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
540
ctcgtacccg tggctatgaa agctgccggt ctagaccttg gcgaggtgtg ctctcgacta
600
gtcgatgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
660
cgtgcgcgct aagcaggcat ctgtcgtctt gctcggcgct gtccttgcca gtgtgatggt
720
cttcctcgga ctgtggcaga tgaacgtttt tgagtcccaa cgtgacgact cgacgcaggc
780
gcgtatcaac gagccagtga tcacctggaa tgaggcgccct aagaaggcca gtgtcatggc
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tcagtacgga cgcgggtga cggtagcggg cacgttccaa ccgtcgacca caaccttgat
900
aggcacatcg tggccagtac gcgt
924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe
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 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
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 120
 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg
 180
 gcccgacgg acgcatcggc cctctttctc tgaaccgccc tgtttgctc gctgctccag
 240
 ttcaagcaca ttacgtata cgtcgcgccg gcgtactttg tgtacctgct gcgtgcgtac
 300
 atgctcccga gcatgccgac gtccgcatcg acggggagcg cggcgatcga tcgcaccatc
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc
398

<210> 1352
<211> 70
<212> PRT
<213> Homo sapiens

<400> 1352
Xaa Cys Thr Glu Gly Val Leu Val Tyr Ala Leu Tyr Leu Leu Ser Arg
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Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Leu Ser Ile Leu
20 25 30
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn
35 40 45
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp
50 55 60
Ala Ser Ala Leu Phe Leu
65 70

<210> 1353
<211> 480
<212> DNA
<213> Homo sapiens

<400> 1353
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accctcacac ccaccccacc ccagtcaca cggatcgtgc ggggcattgg acagcctcgg
120
ggcaacatgc tcctggtggg tatcgggggc agcggacgcc agagtctggc ccgcctggct
180
tcattccatct gcgactacac caccttccag atcgaggtca ccaaacatta tcggaagcag
240
gagttccgag atgatataaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg
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360
atcctcagct caggcgaggt gcccacattt ttcaggcctg atgaatttga agagatccag
420
tcgcatatca tagaccaggc ccgggtggag caggtgcctg agtcacgga cagcctcttc
480

<210> 1354
<211> 160
<212> PRT
<213> Homo sapiens

<400> 1354
Xaa Ala Pro Ile Pro Ser Leu Gly Pro Gly Gly Pro Leu Ser Leu Leu
1 5 10 15
Ser Gln Leu Ile Thr Leu Thr Pro Thr Pro Pro Pro Val Thr Arg Ile
20 25 30
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

			35					40						45					
Gly	Gly	Ser	Gly	Arg	Gln	Ser	Leu	Ala	Arg	Leu	Ala	Ser	Ser	Ile	Cys				
	50					55					60								
Asp	Tyr	Thr	Thr	Phe	Gln	Ile	Glu	Val	Thr	Lys	His	Tyr	Arg	Lys	Gln				
65					70					75					80				
Glu	Phe	Arg	Asp	Asp	Ile	Lys	Arg	Leu	Tyr	Arg	Gln	Ala	Gly	Val	Glu				
				85					90					95					
Leu	Lys	Thr	Thr	Ser	Phe	Ile	Phe	Val	Asp	Thr	Gln	Ile	Ala	Asp	Glu				
			100					105					110						
Ser	Phe	Leu	Glu	Asp	Ile	Asn	Asn	Ile	Leu	Ser	Ser	Gly	Glu	Val	Pro				
		115					120					125							
His	Leu	Phe	Arg	Pro	Asp	Glu	Phe	Glu	Glu	Ile	Gln	Ser	His	Ile	Ile				
	130					135					140								
Asp	Gln	Ala	Arg	Val	Glu	Gln	Val	Pro	Glu	Ser	Ser	Asp	Ser	Leu	Phe				
145					150					155					160				

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<210> 1355
<211> 1063
<212> DNA
<213> Homo sapiens
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<400> 1355
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120
ggccctgtga gacctgtcc tccaccgcct ctttccttgt gtccattccc tgagcctggg
180
gaagttgctg cagagccaca ggtcggngag acgctgagtc tgggcgagcg cttgctgccc
240
gacagctgga gaaacagcag cgggggggccg tgtccatgtg gcaagccaag ccatcgaggg
300
gatcacaggc cccttcaggg aagggaactga gcacctgcca cctgcctcca ggatgggcct
360
gatccccct cctgtgtacc ccacaggctg cagtgcacct gccagcaca cacctgcggg
420
ggcacctgcg accgctgctg ccccggttc aatcagcagc cgtggaagcc tgcgactgcc
480
aacagtgcca acgagtgcca gtctgtaac tgctacggcc atgccaccga ctgttactac
540
gacctgagg tggaccggcg ccgcgccagc cagagcctgg atggcaccta tcaggggtggg
600
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660
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720
tgcgagtccg acttcacgga tggcacctgc gaggacctga cgggtcgatg ctactgccgg
780
cccaacttct ctggggagcg gtgtgacgtg tgtgccgagg gcttcacggg cttcccaagc
840
tgctaccgga cgccctcgtc ctccaatgac accagggagc aggtgctgcc agccggccag
900
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960

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agggtggggcc gctgttttgc caacccaac ttccaaggca cccattgtga gctctgcgcg
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ccagggttct acggccccgg ctgccctggg tcccttcacg cgt
1063

<210> 1356

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1356

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Pro	His	Arg	Leu	Gln	Cys	Thr	Cys	Gln	His	Asn	Thr	Cys	Gly	Gly	Thr
			20					25					30		
Cys	Asp	Arg	Cys	Cys	Pro	Gly	Phe	Asn	Gln	Gln	Pro	Trp	Lys	Pro	Ala
			35				40					45			
Thr	Ala	Asn	Ser	Ala	Asn	Glu	Cys	Gln	Ser	Cys	Asn	Cys	Tyr	Gly	His
	50					55					60				
Ala	Thr	Asp	Cys	Tyr	Tyr	Asp	Pro	Glu	Val	Asp	Arg	Arg	Arg	Ala	Ser
65					70					75					80
Gln	Ser	Leu	Asp	Gly	Thr	Tyr	Gln	Gly	Gly	Gly	Val	Cys	Ile	Asp	Cys
			85					90					95		
Gln	His	His	Thr	Ala	Gly	Val	Asn	Cys	Glu	Arg	Cys	Leu	Pro	Gly	Phe
			100					105					110		
Tyr	Arg	Ser	Pro	Asn	His	Pro	Leu	Asp	Ser	Pro	His	Val	Cys	Arg	Arg
	115						120					125			
Cys	Asn	Cys	Glu	Ser	Asp	Phe	Thr	Asp	Gly	Thr	Cys	Glu	Asp	Leu	Thr
	130					135					140				
Gly	Arg	Cys	Tyr	Cys	Arg	Pro	Asn	Phe	Ser	Gly	Glu	Arg	Cys	Asp	Val
145					150					155				160	
Cys	Ala	Glu	Gly	Phe	Thr	Gly	Phe	Pro	Ser	Cys	Tyr	Pro	Thr	Pro	Ser
				165					170					175	
Ser	Ser	Asn	Asp	Thr	Arg	Glu	Gln	Val	Leu	Pro	Ala	Gly	Gln	Ile	Val
		180						185					190		
Asn	Cys	Asp	Cys	Ser	Ala	Ala	Gly	Thr	Gln	Gly	Asn	Ala	Cys	Arg	Lys
	195						200					205			
Asp	Pro	Arg	Val	Gly	Arg	Cys	Phe	Ala	Asn	Pro	Asn	Phe	Gln	Gly	Thr
	210					215					220				
His	Cys	Glu	Leu	Cys	Ala	Pro	Gly	Phe	Tyr	Gly	Pro	Gly	Cys	Pro	Gly
225					230					235					240
Ser	Leu	His	Ala												

<210> 1357

<211> 663

<212> DNA

<213> Homo sapiens

<400> 1357

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120

ttcaacaccc cegttttgcc tgtggggggg gtacgccctg taatcctgca aaggcccggt
 180
 tgggtgtccg gggttttcgt cggctctccc aaccatcatc tagacggcgt ggcgatgtgg
 240
 tgcgagctgc ttgcggcggt gttctgtgcc cgagcttgcc tcgcctggct gcaagaatcc
 300
 ctggctcatc gagcttcagc gtcagtcaag tcgcaattgc ggcgcgacat cctgcaagcc
 360
 aggttgtcgc gtcccactga cgcaacaatg ccgtcgagaa ccctcatcag cctgatgaca
 420
 acaggtctgg acgcctcga cggctactac tcgaagtacc ttcccagct tgtgctggcc
 480
 gtcacgtgc cagcagtgt agccaccgt atcggcctaa acgacctcac cagcctcgtc
 540
 atcgtcgtcg tgacgatccc gtcaccccc gttttcatgg ccctcattgg ctggcggacc
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 gaggcggccg tagcaaaacg gttcaaggta gccacccgac tggccaacca cttcgctgat
 660
 ctg
 663

<210> 1358
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 1358
 Xaa Pro Pro Pro Pro Gly Gly Gly Gly Gly Gly Asn Asn Thr Arg Lys
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 Val Asp Arg Tyr Pro Ser Trp Ser Ser Trp Ser Ile Tyr Gly Pro Arg
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 Cys Gly Phe Gly Thr Glu Val Glu Phe Asn Thr Pro Val Leu Pro Val
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 Gly Gly Val Arg Pro Val Ile Leu Gln Arg Pro Gly Trp Cys Pro Gly
 50 55 60
 Val Phe Val Gly Leu Pro Asn His His Leu Asp Gly Val Ala Met Trp
 65 70 75 80
 Cys Glu Leu Leu Ala Ala Val Phe Cys Ala Arg Ala Cys Leu Ala Trp
 85 90 95
 Leu Gln Glu Ser Leu Ala His Arg Ala Ser Ala Ser Val Lys Ser Gln
 100 105 110
 Leu Arg Arg Asp Ile Leu Gln Ala Arg Leu Ser Arg Pro Thr Asp Ala
 115 120 125
 Thr Met Pro Ser Arg Thr Leu Ile Ser Leu Met Thr Thr Gly Leu Asp
 130 135 140
 Ala Leu Asp Gly Tyr Tyr Ser Lys Tyr Leu Pro Gln Leu Val Leu Ala
 145 150 155 160
 Val Ile Val Pro Ala Val Leu Ala Thr Ala Ile Gly Leu Asn Asp Leu
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 Thr Ser Leu Val Ile Val Val Val Thr Ile Pro Leu Ile Pro Val Phe
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<212> DNA
<213> Homo sapiens

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35 40 45
Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile
50 55 60
Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser
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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
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Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
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Val	Gly	Ala	Ala	Gly	Ala	Gly	Ala	His	Cys	Gln	Arg	Cys	Asp	Ala	Ala
65				70					75					80	
Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
			85					90						95	
Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
			100					105						110	
Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
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Glu	Ile	Thr	Tyr	Val	Arg	Leu	Lys	Phe	His	Thr	Ser	Arg	Pro	Glu	Ser
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Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
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Gln	Phe	Tyr	Ser	Ala	Ser	Cys	Gln	Lys	Thr	Tyr	Gly	Arg	Pro	Glu	Gly
			165					170						175	
Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
		180					185						190		
Glu	Phe	Ser	Asp	Ile	Ser	Pro	Leu	Ser	Gly	Gly	Asn	Val	Ala	Phe	Ser
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Thr	Leu	Glu	Gly	Arg	Pro	Ser	Ala	Tyr	Asn	Phe	Glu	Glu	Ser	Pro	Gly
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Leu	Gln	Glu	Trp	Val	Thr	Ser	Thr	Glu	Leu	Leu	Ile	Ser	Leu	Asp	Arg
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Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
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Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

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Cys	Asn	Gly	His	Ala	Ser	Glu	Cys	Gly	Pro	Asp	Val	Ala	Gly	Gln	Leu	
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Ala	Cys	Arg	Cys	Gln	His	Asn	Thr	Thr	Gly	Thr	Asp	Cys	Glu	Arg	Cys	
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Leu	Pro	Phe	Phe	Gln	Asp	Arg	Pro	Trp	Ala	Arg	Gly	Thr	Ala	Glu	Ala	
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Ala	His	Glu	Cys	Leu	Pro	Cys	Asn	Cys	Ser	Gly	Arg	Ser	Glu	Glu	Cys	
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Thr	Phe	Asp	Arg	Glu	Leu	Phe	Arg	Ser	Thr	Gly	His	Gly	Gly	Arg	Cys	
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His	His	Cys	Arg	Asp	His	Thr	Ala	Gly	Pro	His	Cys	Glu	Arg	Cys	Gln	
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Glu	Asn	Phe	Tyr	His	Trp	Asp	Pro	Arg	Met	Pro	Cys	Gln	Pro	Cys	Asp	
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Cys	Gln	Ser	Ala	Gly	Ser	Leu	His	Leu	Gln	Cys	Asp	Asp	Thr	Gly	Thr	
385							390					395				
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Pro	Gly	Phe	His	Ser	Leu	Ser	Glu	Gly	Gly	Cys	Arg	Pro	Cys	Thr	Cys	
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Asn	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Cys	Asp	Pro	Arg	Ser	Gly	Arg	Cys	
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Pro	Cys	Lys	Glu	Asn	Val	Glu	Gly	Asn	Leu	Cys	Asp	Arg	Cys	Arg	Pro	
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Val	His	His	Ile	Leu	Ser	Asp	Phe	His	Gln	Gly	Ala	Glu	Gly	Trp	Trp	
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645							650					655				
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Val Pro Cys Thr Cys Asn Gln His Gly Thr Cys Asp Pro Asn Thr Gly		
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Ile Cys Val Cys Ser His His Thr Glu Gly Pro Ser Cys Glu Arg Cys		720
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Leu Pro Gly Phe Tyr Gly Asn Pro Phe Ala Gly Gln Ala Asp Asp Cys		735
	740	745
Gln Pro Cys Pro Cys Pro Gly Gln Ser Ala Cys Thr Thr Ile Pro Glu		750
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Ser Gly Glu Val Val Cys Thr His Cys Pro Pro Gly Gln Arg Gly Arg		765
	770	775
Arg Cys Glu Val Cys Asp Asp Gly Phe Phe Gly Asp Pro Leu Gly Leu		780
	785	790
Phe Gly His Pro Gln Pro Cys His Gln Cys Gln Cys Ser Gly Asn Val		795
	805	810
Asp Pro Asn Ala Val Gly Asn Cys Asp Pro Leu Ser Gly His Cys Leu		815
	820	825
Arg Cys Leu His Asn Thr Thr Gly Asp His Cys Glu His Cys Gln Glu		830
	835	840
Gly Phe Tyr Gly Ser Ala Leu Ala Pro Arg Pro Ala Asp Lys Cys Met		845
	850	855
Pro Cys Ser Cys His Pro Gln Gly Ser Val Ser Glu Gln Met Pro Cys		860
	865	870
Asp Pro Val Thr Gly Gln Cys Ser Cys Leu Pro His Val Thr Ala Arg		875
	885	890
Asp Cys Ser Arg Cys Tyr Pro Gly Phe Phe Asp Leu Gln Pro Gly Arg		895
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Cys His Pro Lys Thr Gly Gln Cys Thr Cys Arg Pro Gly Val Thr Gly		925
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Gly Cys Arg Ala Cys Arg Cys Ser Pro Leu Gly Ala Ala Ser Ala Gln		955
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Cys His Tyr Asn Gly Thr Cys Val Cys Arg Pro Gly Phe Glu Gly Tyr		975
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Lys Cys Asp Arg Cys His Tyr Asn Phe Phe Leu Thr Ala Asp Gly Thr		990
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His Cys Gln Gln Cys Pro Ser Cys Tyr Ala Leu Val Lys Glu Glu Thr		1005
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Ala Ala Arg Glu Gln Leu Gln Arg Leu Asn Lys Gly Ala Arg Cys Ala		1085
	1090	1095
Gln Ala Gly Ser Gln Lys Thr Cys Thr Gln Leu Ala Asp Leu Glu Ala		1100
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Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala					
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Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala					
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Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro					
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Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln					
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Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser					
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Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala					
	1380		1385		1390
Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys					
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Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val					
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Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile					
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Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu					
	1490		1495		1500
Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr					
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Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser					
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Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Gln Glu					
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Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp					

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 <211> 392
 <212> DNA
 <213> Homo sapiens

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<210> 1364
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 <212> PRT
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 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
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 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
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<210> 1365
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<400> 1365

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 35 40 45
 Lys Ser Val Ala Val Asn Lys Gly Arg Leu Lys Arg Leu Gly Ile Thr
 50 55 60
 His Ile Leu Asn Ala Ala His Gly Thr Gly Val Tyr Thr Gly Pro Glu
 65 70 75 80
 Phe Tyr Thr Gly Leu Glu Ile Gln Tyr Leu Gly Val Glu Val Asp Asp
 85 90 95
 Phe Pro Glu Val Asp Ile Ser Gln His Phe Arg Lys Ala Ser Glu Phe
 100 105 110
 Leu Asp Glu Ala Leu Leu Thr Tyr Arg Gly Lys Val Leu Val Ser Ser
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 <212> DNA
 <213> Homo sapiens

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Thr Arg

<210> 1369
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<212> DNA
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<210> 1370
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<212> PRT
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      20           25           30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
      35           40           45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
      50           55           60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
65           70           75           80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
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Asn Met Leu Tyr Phe Ser Arg Asn
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<210> 1371
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<210> 1372
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 <212> PRT
 <213> Homo sapiens

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Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
      20           25           30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

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35 40 45
 Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
 50 55 60
 Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
 65 70 75 80
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 85 90 95
 Lys Leu Tyr Leu Gln
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<210> 1373
 <211> 369
 <212> DNA
 <213> Homo sapiens

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<210> 1374
 <211> 98
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
 50 55 60
 Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
 65 70 75 80
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 Leu Arg

<210> 1375
 <211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

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282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

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Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
			20					25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
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Val	Glu	Asn	Pro	Ala	Ala	Thr	Lys	Glu	Ser	Gln					
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<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

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<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378

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			35				40					45			
Asp	Ser	Phe	Leu	Gly	Gly	Leu	Lys	Trp	Cys	Ser	Asp	Gln	Ser	Glu	Ile
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Ile	Ser	Asn	Gln	Tyr	Asn	Asn	Glu	Pro	Ser	Asn	Ile	Phe	Glu	Lys	Ile
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Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
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Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
			100					105					110		
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

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Pro Asp Gly Thr Pro Pro Pro Gln Glu Ala Glu Glu Pro Ser Leu Leu		
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Lys Lys Leu Leu Leu Ala Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu		
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Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile		
165	170	175
Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys		
180	185	190
Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser		
195	200	205
Glu Leu Leu Lys Tyr Leu Thr Asn Asp Asp Pro Pro His Thr Lys		
210	215	220
Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys		
225	230	235
Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr		
245	250	255
Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly		
260	265	270
Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu		
275	280	285
Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala		
290	295	300
Asn Gln Asp Asn Pro Phe Arg Ala Ser Pro Lys Leu Lys Ser Ser Cys		
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Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser		
325	330	335
Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser		
340	345	350
Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His		
355	360	365
Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His		
370	375	380
Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile		
385	390	395
Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser		
405	410	415
Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys		
420	425	430
Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser		
435	440	445
Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys		
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His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys		
465	470	475
Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys		
485	490	495
Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp		
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Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr		
515	520	525
Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn		
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Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln		

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			610			615							620		
Arg	Ser	Pro	Tyr	Ser	Arg	Arg	Pro	Arg	Tyr	Asp	Ser	Tyr	Glu	Glu	Tyr
			625			630					635				640
Gln	His	Glu	Arg	Leu	Lys	Arg	Glu	Glu	Tyr	Arg	Arg	Glu	Tyr	Glu	Lys
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Arg	Glu	Ser	Glu	Arg	Ala	Lys	Gln	Arg	Glu	Arg	Gln	Arg	Gln	Lys	Ala
			660					665						670	
Ile	Glu	Glu	Arg	Arg	Val	Ile	Tyr	Val	Gly	Lys	Ile	Arg	Pro	Asp	Thr
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Thr	Arg	Thr	Glu	Leu	Arg	Asp	Arg	Phe	Glu	Val	Phe	Gly	Glu	Ile	Glu
			690				695							700	
Glu	Cys	Thr	Val	Asn	Leu	Arg	Asp	Asp	Gly	Asp	Ser	Tyr	Gly	Phe	Ile
				710						715					720
Thr	Tyr	Arg	Tyr	Thr	Cys	Asp	Ala	Phe	Ala	Ala	Leu	Glu	Asn	Gly	Tyr
				725						730					735
Thr	Leu	Arg	Arg	Ser	Asn	Glu	Thr	Asp	Phe	Glu	Leu	Tyr	Phe	Cys	Gly
			740					745						750	
Arg	Lys	Gln	Phe	Phe	Lys	Ser	Asn	Tyr	Ala	Asp	Leu	Asp	Ser	Asn	Ser
			755					760						765	
Asp	Asp	Phe	Asp	Pro	Ala	Ser	Thr	Lys	Ser	Lys	Tyr	Asp	Ser	Leu	Asp
			770				775							780	
Phe	Asp	Ser	Leu	Leu	Lys	Glu	Ala	Gln	Arg	Ser	Leu	Arg	Arg		
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<210> 1379

<211> 590

<212> DNA

<213> Homo sapiens

<400> 1379

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<210> 1380
<211> 141
<212> PRT
<213> Homo sapiens

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Cys Pro Cys Arg Val Ala Ala Ser Pro Ile Ser Ala Leu Gly Val Pro
35 40 45
Ala Leu Trp Pro Arg His Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys
50 55 60
Gly Arg Val Xaa Pro Ser Leu Pro Ser Glu Ser Leu Pro Cys Gly Arg
65 70 75 80
Val Xaa Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa
85 90 95
Pro Pro Leu Pro Ser Val Ser Leu Pro Cys Gly Arg Val Xaa Pro Pro
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Leu Pro Ser Val Ser Pro Pro Cys Gly Arg Val Xaa Pro Ser Leu Pro
115 120 125
Ser Val Ser Pro Pro Cys Gly Arg Val Thr His Leu Cys
130 135 140

<210> 1381
<211> 433
<212> DNA
<213> Homo sapiens

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<210> 1382

<211> 123
 <212> PRT
 <213> Homo sapiens

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 Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
 35 40 45
 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
 50 55 60
 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
 65 70 75 80
 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
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 Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
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 <211> 906
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 1384
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<212> PRT
<213> Homo sapiens

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35 40 45
Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
50 55 60
Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
65 70 75 80
Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp
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Asn

<210> 1385
<211> 210
<212> DNA
<213> Homo sapiens

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<210> 1386
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<212> PRT
<213> Homo sapiens

<400> 1386
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20 25 30
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35 40 45
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 50 55 60
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<210> 1387
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 <212> DNA
 <213> Homo sapiens

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<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1388
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 Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
 35 40 45
 Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
 50 55 60
 Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
 65 70 75 80
 Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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<210> 1390
 <211> 1156
 <212> PRT
 <213> Homo sapiens

<400> 1390
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 35 40 45
 Ala Ala Pro Ile Pro Ile Leu Pro Glu Arg Gly Val Ser Leu Phe Pro
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 Tyr Gly Ala Asp Ala Gly Asp Leu Glu Phe Val Arg Arg Thr Val Asp
 65 70 75 80
 Phe Thr Ser Pro Leu Phe Lys Pro Ala Thr Gly Phe Pro Leu Gly Ser
 85 90 95
 Ser Leu Arg Asp Ser Leu Tyr Phe Thr Asp Asn Gly Gln Ile Ile Phe
 100 105 110
 Pro Glu Ser Asp Tyr Gln Ile Phe Ser Tyr Pro Asn Pro Leu Pro Thr
 115 120 125
 Gly Phe Thr Gly Arg Asp Pro Val Ala Leu Val Ala Pro Phe Trp Asp

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Glu	Thr	Phe	Tyr	Gly	Glu	His	Ser	Leu	Leu	Val	Gln	Gln	Ala	Glu	Ser
		165		170		175									
Trp	Ile	Arg	Lys	Ile	Thr	Asn	Asn	Gly	Gly	Tyr	Lys	Ala	Arg	Trp	Ala
		180		185		190									
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Leu	Gly	Ser	Asn	Thr	Tyr	Gln	Ala	Ile	Leu	Ser	Thr	Asp	Gly	Ser	Arg
		210		215		220									
Ser	Tyr	Ala	Leu	Phe	Leu	Tyr	Gln	Ser	Gly	Gly	Met	Gln	Trp	Asp	Val
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Gly	Tyr	Phe	Glu	Asn	Ser	Pro	Leu	Met	Ser	Gln	Pro	Val	Trp	Glu	Arg
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Tyr	Arg	Pro	Asp	Arg	Phe	Leu	Asn	Ser	Asn	Ser	Gly	Leu	Gln	Gly	Leu
		275		280		285									
Gln	Phe	Tyr	Arg	Leu	His	Arg	Glu	Glu	Arg	Pro	Asn	Tyr	Arg	Leu	Glu
		290		295		300									
Cys	Leu	Gln	Trp	Leu	Lys	Ser	Gln	Pro	Arg	Trp	Pro	Ser	Trp	Gly	Trp
305		310		315		320									
Asn	Gln	Val	Ser	Cys	Pro	Cys	Ser	Trp	Gln	Gln	Gly	Arg	Arg	Asp	Leu
		325		330		335									
Arg	Phe	Gln	Pro	Val	Ser	Ile	Gly	Arg	Trp	Gly	Leu	Gly	Ser	Arg	Gln
		340		345		350									
Leu	Cys	Ser	Phe	Thr	Ser	Trp	Arg	Gly	Gly	Val	Cys	Cys	Ser	Tyr	Gly
		355		360		365									
Pro	Trp	Gly	Glu	Phe	Arg	Glu	Gly	Trp	His	Val	Gln	Arg	Pro	Trp	Gln
		370		375		380									
Leu	Ala	Gln	Glu	Leu	Glu	Pro	Gln	Ser	Trp	Cys	Cys	Arg	Trp	Asn	Asp
385		390		395		400									
Lys	Pro	Tyr	Leu	Cys	Ala	Leu	Tyr	Gln	Gln	Arg	Arg	Pro	His	Val	Gly
		405		410		415									
Cys	Ala	Thr	Tyr	Arg	Pro	Pro	Gln	Pro	Ala	Trp	Met	Phe	Gly	Asp	Pro
		420		425		430									
His	Ile	Thr	Thr	Leu	Asp	Gly	Val	Ser	Tyr	Thr	Phe	Asn	Gly	Leu	Gly
		435		440		445									
Asp	Phe	Leu	Leu	Val	Gly	Ala	Gln	Asp	Gly	Asn	Ser	Ser	Phe	Leu	Leu
		450		455		460									
Gln	Gly	Arg	Thr	Ala	Gln	Thr	Gly	Ser	Ala	Gln	Ala	Thr	Asn	Phe	Ile
465		470		475		480									
Ala	Phe	Ala	Ala	Gln	Tyr	Arg	Ser	Ser	Ser	Leu	Gly	Pro	Val	Thr	Val
		485		490		495									
Gln	Trp	Leu	Leu	Glu	Pro	His	Asp	Ala	Ile	Arg	Val	Leu	Leu	Asp	Asn
		500		505		510									
Gln	Thr	Val	Thr	Phe	Gln	Pro	Asp	His	Glu	Asp	Gly	Gly	Gly	Gln	Glu
		515		520		525									
Thr	Phe	Asn	Ala	Thr	Gly	Val	Leu	Leu	Ser	Arg	Asn	Gly	Ser	Glu	Val
		530		535		540									
Ser	Ala	Ser	Phe	Asp	Gly	Trp	Ala	Thr	Val	Ser	Val	Ile	Ala	Leu	Ser
545		550		555		560									
Asn	Ile	Leu	His	Ala	Ser	Ala	Ser	Leu	Pro	Pro	Glu	Tyr	Gln	Asn	Arg

				565					570					575	
Thr	Glu	Gly	Leu	Leu	Gly	Val	Trp	Asn	Asn	Pro	Glu	Asp	Asp	Phe	
			580					585				590			
Arg	Met	Pro	Asn	Gly	Ser	Thr	Ile	Pro	Pro	Gly	Ser	Pro	Glu	Glu	Met
		595					600				605				
Leu	Phe	His	Phe	Gly	Met	Thr	Trp	Gln	Ile	Asn	Gly	Thr	Gly	Leu	Leu
	610					615					620				
Gly	Lys	Arg	Asn	Asp	Gln	Leu	Pro	Ser	Asn	Phe	Thr	Pro	Val	Phe	Tyr
625					630					635					640
Ser	Gln	Leu	Gln	Lys	Asn	Ser	Ser	Trp	Ala	Glu	His	Leu	Ile	Ser	Asn
				645					650					655	
Cys	Asp	Gly	Asp	Ser	Ser	Cys	Ile	Tyr	Asp	Thr	Leu	Ala	Leu	Arg	Asn
			660					665					670		
Ala	Ser	Ile	Gly	Leu	His	Thr	Arg	Glu	Val	Ser	Lys	Asn	Tyr	Glu	Gln
		675					680					685			
Ala	Asn	Ala	Thr	Leu	Asn	Gln	Tyr	Pro	Pro	Ser	Ile	Asn	Gly	Gly	Arg
	690					695					700				
Val	Ile	Glu	Ala	Tyr	Lys	Gly	Gln	Thr	Thr	Leu	Ile	Gln	Tyr	Thr	Ser
705					710					715					720
Asn	Ala	Glu	Asp	Ala	Asn	Phe	Thr	Leu	Arg	Asp	Ser	Cys	Thr	Asp	Leu
				725					730					735	
Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu
		740						745					750		
Pro	Phe	Thr	Leu	Glu	Ile	Leu	Ala	Arg	Ser	Ala	Lys	Ile	Gly	Leu	Ala
		755					760					765			
Ser	Ala	Leu	Gln	Pro	Arg	Thr	Val	Val	Cys	His	Cys	Asn	Ala	Glu	Ser
	770					775					780				
Gln	Cys	Leu	Tyr	Asn	Gln	Thr	Ser	Arg	Val	Gly	Asn	Ser	Ser	Leu	Glu
785					790					795					800
Val	Ala	Gly	Cys	Lys	Cys	Asp	Gly	Gly	Thr	Phe	Gly	Arg	Tyr	Cys	Glu
				805					810					815	
Gly	Ser	Glu	Asp	Ala	Cys	Glu	Glu	Pro	Cys	Phe	Pro	Ser	Val	His	Cys
			820					825					830		
Val	Pro	Gly	Lys	Gly	Cys	Glu	Ala	Cys	Pro	Pro	Asn	Leu	Thr	Gly	Asp
		835					840					845			
Gly	Arg	His	Cys	Ala	Ala	Leu	Gly	Ser	Ser	Phe	Leu	Cys	Gln	Asn	Gln
	850					855					860				
Ser	Cys	Pro	Val	Asn	Tyr	Cys	Tyr	Asn	Gln	Gly	His	Cys	Tyr	Ile	Ser
865					870					875					880
Gln	Thr	Leu	Gly	Cys	Gln	Pro	Met	Cys	Thr	Cys	Pro	Pro	Ala	Phe	Thr
				885					890					895	
Asp	Ser	Arg	Cys	Phe	Leu	Ala	Gly	Asn	Asn	Phe	Ser	Pro	Thr	Val	Asn
			900					905					910		
Leu	Glu	Leu	Pro	Leu	Arg	Val	Ile	Gln	Leu	Leu	Leu	Ser	Glu	Glu	Glu
	915														

995	1000	1005
Pro Arg Arg Ser Glu Glu	Pro Arg Asn Asp Val Val	Phe Gln Pro Ile
1010	1015	1020
Ser Gly Glu Asp Val Arg	Asp Val Thr Ala Leu Asn	Val Ser Thr Leu
1025	1030	1035
Lys Ala Tyr Phe Arg Cys	Asp Gly Tyr Lys Gly Tyr	Asp Leu Val Tyr
1045	1050	1055
Ser Pro Gln Ser Gly Phe	Thr Cys Val Ser Pro Cys	Ser Arg Gly Tyr
1060	1065	1070
Cys Asp His Gly Gly Gln	Cys Gln His Leu Pro Ser	Gly Pro Arg Cys
1075	1080	1085
Ser Cys Val Ser Phe Ser	Ile Tyr Thr Ala Trp Gly	Glu His Cys Glu
1090	1095	1100
His Leu Ser Met Lys Leu	Asp Ala Phe Phe Gly Ile	Phe Phe Gly Ala
1105	1110	1115
Leu Gly Gly Leu Leu Leu	Gly Val Gly Thr Phe Val	Val Leu Arg
1125	1130	1135
Phe Trp Gly Cys Ser Gly	Ala Arg Phe Ser Tyr Phe	Leu Asn Ser Ala
1140	1145	1150
Glu Ala Leu Pro		
1155		

<210> 1391
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1391
 gtcgacggca tgcaggtcca tgacaaggca accgacctca accgcctgcg ccagaagatc
 60
 ggcattgtgt tccagcagtg gaacgccttc ccgcacctca ccgtgctgga aaacgtgatg
 120
 ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcgggtccgg
 180
 caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcana gctttccggc
 240
 ggccagcaac agcgcatggc gattgcccgg gccctggcca tgtcgccgga ctacatgctg
 300
 ttcgacgaag ccacctcggc ccttgatccg cagttggtgg gcgaggtgct ggacaccatg
 360
 cgcattgctg ccgaagacgg catgaccatg gtcctggtga cccatgaaat ccgctttgcc
 420
 cgcatgtgtt ccgatcgctt ggcgttcttt cgcaacggcc tgggtgcacga gatcggcgcg
 480
 c
 481

<210> 1392
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 1392
 Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

```

      1           5           10           15
Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
      20           25           30
Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
      130          135          140
Asp Arg Val Ala Phe Phe Arg Asn Gly Leu Val His Glu Ile Gly Ala
      145          150          155          160

```

<210> 1393
 <211> 309
 <212> DNA
 <213> Homo sapiens

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<400> 1393
cggccgccat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
60
tacgaacccg acgaacacgg acaccgcaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggcccttc tgcgcgtca gggcatcagg tggcccgtcg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcgtgg ggtgaccgcg cgtaagaagg ttncgcacca ccatcgctga
240
cccggtgccc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

```

<210> 1394
 <211> 79
 <212> PRT
 <213> Homo sapiens

```

<400> 1394
Arg Pro Pro Ser Ala Arg Ala Leu Trp Asp Met Ala Ile Thr Glu Val
1           5           10           15
Leu Ala Gly Tyr Tyr Glu Pro Asp Glu His Gly His Arg Lys Pro Glu
20          25          30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
35          40          45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
50          55          60
Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

```

65

70

75

<210> 1395

<211> 347

<212> DNA

<213> Homo sapiens

<400> 1395

accggtgggg ttcgtggtgg cctggttact ttttgccgcg agcgggtgtg tgtggggcgt
60tatgacggta gtcgtgggcg aaacggtgct tgctgttggt cgccgtcaac gtcgaagagc
120ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
180gtcgggtgggg gagatccct cagttgcact agagcacgtg gccgatgacg tggaggtatt
240ggctcaggct aggcgggctc atgcagtggg cggaagcgtt tccgacgcc tcattgccac
300ctcccggcaa ccagggatgg ctggtctggt gccactagcc cacgcgt
347

<210> 1396

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1396

Met Thr Val Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
1 5 10 15Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
20 25 30Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35 40 45Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
50 55 60Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65 70 75 80Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85 90 95

<210> 1397

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1397

caattgcgcg gggtactgca ggcgaagatg cagatgatgt cggacaccaa tttcctcgac
60ctggcccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
120aaccgcttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180ggtcgactgt cctgcagcga cccggcgcttc gctgccacc agatacaaag cctgctcaag
240

gcgttcgcct tttggccgca aatcaccctg ggccagccgg tgctggatgc cgccagccag
300
gccaacgt
308

<210> 1398
<211> 93
<212> PRT
<213> Homo sapiens

<400> 1398
Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala
1 5 10 15
Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn
20 25 30
Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
35 40 45
Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
50 55 60
Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
65 70 75 80
Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
85 90

<210> 1399
<211> 539
<212> DNA
<213> Homo sapiens

<400> 1399
gctagctaac atttattttt gtttttatta ttgttatcta gtggtaaaaa tttcttaagc
60
aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaatgcct
120
ttagatattt taacttcac agtactatct gtagtaggag gctgatttta ctaaaattag
180
ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat
240
ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgctg
300
cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttcccgccc
360
tactttttaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
420
cctttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacia tacaatggg
480
aacaagaaa attgcttcac catctgtgaa cccctccttt ttagtcccc ttcacgcgt
539

<210> 1400
<211> 90
<212> PRT
<213> Homo sapiens

<400> 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1           5           10           15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
          20          25          30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
          35          40          45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
          50          55          60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65          70          75          80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
          85          90

```

<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

```

ttcgaggggt cacttggact caagcttcgc gaagtccggg acctcggacg accgattttt
60
cggctgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
120
ncattggggg ttgatggccg cgtttccctg ctgctgggcg cgatcctcat cgtcaccggc
180
ccaacgggtga ttaacccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtcttg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctccggcgcca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttcgttggc cccatcgggt ggatcgtcac cgcgatgatg
420
aaacggcacc tcatcccga cttcctacaa ggcgtgattt tcgttggggg cgccgttgga
480
acgtgtgttg gcgctaacgt cattcgggag gaatcgggcc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgtccta ttcatcatgc ttgcaggacg cgt
653

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<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1           5           10           15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
          20          25          30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

35	40	45
Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile		
50	55	60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu		
65	70	75
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala		80
	85	90
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly		95
	100	105
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe		110
	115	120
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu		125
	130	135
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly		140
145	150	155
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala		160
	165	170
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu		175
	180	185
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly		190
	195	200
Val Leu Phe Ile Met Leu Ala Gly Arg		205
210	215	

<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

aagctttgca gtttcttggt atccaaatcc aggcgttctt ggtctttttc cacaacagtg

60

tgtgccacat gaaatggaac acgggcaaac atatctgac caggaaacat tagccaagta

120

tgttccttgg ggtcatgac tccacaagtt gggcatatct cctttatcag ctgcttgcca

180

gagcttcctt ccattctctt cattatgacc tcaaaggag atggcacgct agtcttggac

240

gtcctagctt gtttccgaag ggctgtcaga gcctccctgt taccatttct tatcttatca

300

ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc

360

agagcctctt gaagctgctt catgttgga tcc

393

<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu

1

5

10

15

Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

      20      25      30
Asn Gly Asn Arg Glu Ala Leu Thr Ala Leu Arg Lys Gln Ala Arg Thr
      35      40      45
Ser Lys Thr Ser Val Pro Ser Pro Phe Glu Val Ile Met Lys Glu Met
      50      55      60
Glu Gly Ser Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys
65      70      75      80
Gly Asp His Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser
      85      90      95
Asp Met Phe Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu
      100      105      110
Lys Asp Gln Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser
      115      120      125

```

<210> 1405
 <211> 421
 <212> DNA
 <213> Homo sapiens

<400> 1405
 nnccgactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtcaaa
 60
 ggcgaaacca gcctgcaatg gctcggcccg gacgaatggc tgctgatcgt gccagcggg
 120
 gaagagttcg ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc
 180
 gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gcccgaaact gcgcgacgtg
 240
 ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccgggtggg caaggcgggtg
 300
 ggcacgggtg tcgccaagtc gcaactgggtg atccgccata ccgccgaaga cacctgggaa
 360
 ctgctgatcc gtcgcagctt ctcggattac tgggtggctgt gggtgcagga cgcggctgca
 420
 t
 421

<210> 1406
 <211> 140
 <212> PRT
 <213> Homo sapiens

```

<400> 1406
Xaa Arg Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln
1      5      10      15
Val Ile Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu
      20      25      30
Trp Leu Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn
      35      40      45
Leu Arg Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser
      50      55      60
Gly Gly Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val
65      70      75      80
Leu Met Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val

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<210> 1408
<211> 335
<212> PRT
<213> Homo sapiens
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<400> 1408

```

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1           5           10           15
Val Leu Glu Leu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
      20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Leu Glu Ala Ala Ser Lys Phe Gln
      35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
      50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
      85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
      100          105          110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
      115          120          125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
      130          135          140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
145          150          155          160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
      165          170          175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
      180          185          190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
      195          200          205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
      210          215          220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
225          230          235          240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
      245          250          255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
      260          265          270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
      275          280          285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
      290          295          300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
305          310          315          320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
      325          330          335

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<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
60
gcacgagata gcaccatgca actgatcgat atcggcggtca acctgaccaa cagcagtttc
120

```

cacgaccaac aggccgcaat cgtcagagcg gcgctggagg ccggcggttac gcaaattgctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg cccacctggt cgccacggcc ggcgtgcac
 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
 1 5 10 15
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

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<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

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Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35      40      45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50      55      60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
65      70      75      80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85      90      95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
      100      105

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<210> 1413
 <211> 385
 <212> DNA
 <213> Homo sapiens

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180
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240
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 <212> PRT
 <213> Homo sapiens

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Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
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Val Ile Asn Arg Val Leu Ser
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<210> 1415
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 <212> DNA
 <213> Homo sapiens

<400> 1415

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<212> PRT
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20 25 30
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35 40 45
Gln Gly Pro Ala Glu Ser Ser Ser Leu Ser Gly Cys Gly Ser Trp Gln
50 55 60
Pro Arg Lys Leu Pro Val Phe Lys Ser Leu Arg His Met Arg Gln Val
65 70 75 80
Leu Gly Ala Pro Ser Phe Arg Met Leu Ala Trp His Val Leu Met Gly
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Asn Gln Val Ile Trp Lys Ser Arg Asp Val Asp Leu Val Gln Ser Ala
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Phe Glu Val Leu Arg Val Arg Thr Ser Phe Pro
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<210> 1417
<211> 5058
<212> DNA
<213> Homo sapiens

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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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      35           40           45
Ser Thr Thr Ala Thr Leu Glu Gly Gln Ser Thr Ala Ala Ser Ser Arg
      50           55           60
Thr Ser Asn Gln Asp Ile Ser Ala Ser Ser Gln Asn His Gln Thr Lys
65           70           75           80
Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
      85           90           95
Met Thr Ser Thr Leu Phe Ser Ser Pro Ser Val His Asn Val Met Glu
      100          105          110
Thr Val Thr Gln Glu Thr Ala Pro Pro Asp Glu Met Thr Thr Ser Phe
      115          120          125
Pro Ser Ser Val Thr Asn Thr Leu Met Met Thr Ser Lys Thr Ile Thr
      130          135          140
Met Thr Thr Ser Thr Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
145          150          155          160
Thr Ala Gly Thr Glu Ser Ser Thr Pro Val Thr Ser Ala Val Ser Ile
      165          170          175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
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Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
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Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
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Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
225          230          235          240
Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
      245          250          255
Ser Val Thr Asn Thr Ser Met Met Thr Ser Glu Lys Ile Thr Val Thr
      260          265          270
Thr Ser Thr Gly Ser Thr Leu Gly Asn Pro Gly Glu Thr Ser Ser Val
      275          280          285
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      290          295          300
Val Asp Pro Glu Gly Gln Ser Pro Ala Thr Phe Ser Arg Thr Ser Thr
305          310          315          320
Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
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Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
      340          345          350
Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
      355          360          365
Thr Val Ser Gln Glu Thr Phe Pro Ser Gly Glu Thr Thr Ile Ser Ser
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Pro Ser Ser Val Ser Asn Thr Phe Leu Val Thr Ser Lys Val Phe Arg

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Ser	Gln	Glu	Ile	Phe	Thr	Leu	His	Glu	Thr	Thr	Thr	Trp	Pro	Ser	Ser
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	1285	1290
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
	1300	1305
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
	1315	1320
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
	1330	1335
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
1345	1350	1355
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1360
	1365	1370
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
	1445	1450
Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
	1460	1465
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1470
	1475	1480
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
	1490	1495
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1500
1505	1510	1515
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser		1520
	1525	1530

<210> 1419
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1419
 aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct
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 gaggttcctt tgatggaaat caagtattgt actggtaaat ttattcagga cagtggctctg
 120
 gattatatca tcatccgttt gtgtgggttc atgcagggtc ttattgggca atatgctgtt
 180
 cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg
 240
 gataccagc acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag
 300
 aaactcatg
 309

<210> 1420
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1420
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys
 1 5 10 15
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly
 20 25 30
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys
 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
 65 70 75 80
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
 85 90 95
 Lys Ala Asn Lys Lys Leu Met
 100

<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1421
 ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca
 60
 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag
 120
 gatgttagag caaagccgag cccagctgct ggcgaaatgca tctgtgatgc ccatgagcag
 180
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagtg
 240
 ccctcagagc cctgattttt cacaaccga ctcctccaag cctcccctgt gggcgggata
 300
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcatg ggcaaaccctt
 360
 cctgacatac tttagacat tacag
 385

<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1422
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg
 1 5 10 15
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu
 20 25 30
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala


```

      35          40          45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
      50          55          60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
      65          70          75          80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
      85          90          95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
      100          105          110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
      115          120          125

```

<210> 1423
 <211> 336
 <212> DNA
 <213> Homo sapiens

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<400> 1423
nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
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ctctattttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
120
tgtgtcaccg tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
300
ctagacctag tcaacaaatt ggtttactgg gtagat
336

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<210> 1424
 <211> 112
 <212> PRT
 <213> Homo sapiens

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<400> 1424
Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
1      5      10      15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
20     25     30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
35     40     45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
50     55     60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
65     70     75     80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
85     90     95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
100    105    110

```

<210> 1425
 <211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

accggtgttt tcgatcacct gggcgggttg agtgactatc gcagtcagat cggcccgatg
60
gcccggcatg tcgaagacct ggccttggcg ctacagggtca ttgccggtga agatgggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaagggggttg
180
cgagtcgcct ggtacagcga tggtagcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgcct tgatccgccc ggccttcccc
300
tcggcggttg gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgcagt cgatccagct gttttcagat tgggatcagt tccgtacagc catgctgggg
420
ttcatggccg actacgacat taccctgtgc cctgtcgatg ccgcgccggc gacccaactg
480
ggagagacgc ggccagggtt gttcagttcc ccccttccta atggcttggc gggttggcct
540
tgtgtggtgg tccgggcccgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgtcgcgttg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

Thr	Gly	Val	Phe	Asp	His	Leu	Gly	Gly	Leu	Ser	Asp	Tyr	Arg	Ser	Gln
1				5					10					15	
Ile	Gly	Pro	Met	Ala	Arg	His	Val	Glu	Asp	Leu	Ala	Leu	Ala	Leu	Gln
			20					25				30			
Val	Ile	Ala	Gly	Glu	Asp	Gly	Val	Asp	Ala	Gly	Val	Ile	Pro	Met	Pro
		35				40					45				
Leu	Arg	Arg	Met	Gln	Thr	Gln	Thr	Leu	Lys	Gly	Leu	Arg	Val	Ala	Trp
	50				55			60							
Tyr	Ser	Asp	Gly	Gly	Ile	Glu	Pro	Val	Asp	Ala	Leu	Thr	His	Thr	Thr
65				70				75					80		
Leu	Gln	Ala	Val	Ala	Asp	Leu	Leu	Asp	Ala	Glu	Gly	Ala	Leu	Ile	Arg
			85					90					95		
Pro	Ala	Phe	Pro	Ser	Ala	Leu	Ser	Asn	Ala	Arg	Asp	Ile	Thr	Glu	Arg
			100					105				110			
Tyr	Trp	Ala	Met	Ser	Gln	Ser	Ser	Gly	Ala	Gln	Ser	Ile	Gln	Leu	Phe
		115				120						125			
Ser	Asp	Trp	Asp	Gln	Phe	Arg	Thr	Ala	Met	Leu	Gly	Phe	Met	Ala	Asp
	130					135					140				
Tyr	Asp	Ile	Ile	Leu	Cys	Pro	Val	Asp	Ala	Ala	Pro	Ala	Thr	Gln	Leu

145						150						155						160
Gly	Glu	Thr	Arg	Pro	Gly	Leu	Phe	Ser	Ser	Pro	Leu	Pro	Asn	Gly	Leu			
					165						170						175	
Ala	Gly	Trp	Pro	Cys	Val	Val	Val	Arg	Ala	Gly	Thr	Asp	Ser	Ala	Gly			
					180						185						190	
Leu	Pro	Val	Gly	Val	Gln	Ile	Val	Ala	Arg	Pro	Trp	His	Glu	Pro	Val			
					195						200						205	
Ala	Leu	Ala	Ala	Ala	Ala	Ala	Ile	Glu	Arg	Ala	Leu	Pro	Phe	Thr	Arg			
					210						215						220	

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<210> 1427
<211> 270
<212> DNA
<213> Homo sapiens
```

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<400> 1427
atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgcttcctgc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttgggctagc
270
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```
<210> 1428
<211> 90
<212> PRT
<213> Homo sapiens
```

```

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
 1             5             10             15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
 20             25             30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
 35             40             45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
 50             55             60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65             70             75             80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
 85             90

```

```
<210> 1429
<211> 384
<212> DNA
<213> Homo sapiens
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<400> 1429
ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

catgaggcaa acgcatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt ggacaccaac atttactgca ccagccggt gctgccgttg
 180
 atcgccctcg acatgggctg cgcagtgtcg acggccaacc tgggggcagg cgcggccttg
 240
 ctgggggttg ccaccgggtt ggcgttttta ttgccatgg gcgaccgctt tgaccggcgc
 300
 aagctggtac tcgggcagat tgcgctggcg ttctgcttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcgttgat cggc
 384

<210> 1430
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1430
 Met Thr Ser Glu Asn Ala Pro Pro Arg Gly Lys Ile Ile Met Met Ala
 1 5 10 15
 Val Ile Ala Gly Ala Val Val Thr Asn Ile Tyr Cys Thr Gln Pro Val
 20 25 30
 Leu Pro Leu Ile Ala Ser Asp Met Gly Val Ala Val Ser Thr Val Asn
 35 40 45
 Leu Val Ala Gly Ala Ala Leu Leu Gly Phe Ala Thr Gly Leu Ala Phe
 50 55 60
 Leu Leu Pro Met Gly Asp Arg Phe Asp Arg Arg Lys Leu Val Leu Gly
 65 70 75 80
 Gln Ile Ala Leu Ala Phe Cys Phe Ala Leu Ala Ala Phe Ala Pro
 85 90 95
 Arg Ile Trp Ala Leu Ile Gly
 100

<210> 1431
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1431
 aagcttcagg gcagggtgcc cctgaagtca agcctgattc tgcattcatc tgtatagcac
 60
 aaactggcga cacctgtgac ttgaccttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctcagcctga gggagggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttgga gagctgtggg ctgcatcccc ctggctcctc gtcccacagg
 240
 cagccccgct gtgtgtctgg tcttgaggt tggctgcagc ttctgggccc tgcttcagc
 300
 cctcttccc atgacctcc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgcct cctctcctt ggcgttctt tctgctgttc cactctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tgggaactggg cggcaatgca ccgtttattg tatttgatga tgcggatgtg
 60
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65 70 75 80
Leu Val Asn Glu Ala Ser Gln Asp Lys Ala Glu Ser His Val Arg Ala
 85 90 95
Met Gln

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

ntttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct
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cgtggcgatg ggacacctgg aaagtgtgtg gatgtctttg aatgtgttaa tgatacaaag
120
ccagcctgcg tattaataaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
240
ataaactgcg agaggtacta cgtgcccga ggagagtgtg gcccagtgtg tgaaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgcctgggga gtgttgccct
480
gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgcactctga cagggaagga ctgcattaat ggtttcaaac gcgatcacia tggttgtcgg
600
acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcaccttg
660
aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgcca
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct. gtcgggcact tgtctcaccg tggatggtea
960
tcatacataa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgccc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccat catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactcennct ccatttgcca cgcacctgga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcaata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgctcct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcacccactg ctactgcctg cagggccaga cttctctgctc gaccgtcagc
 1680
 tgcccccttc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
		20						25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55				60					
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85					90						95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100					105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155				160	
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165					170					175		
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215						220			
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

225		230		235		240
Arg	Pro	Lys	Lys	Cys	Arg	Pro
		245		250		255
Gly	Leu	Leu	Lys	Asn	Lys	His
		260		265		270
Cys	Pro	Glu	Leu	Ser	Cys	Ser
		275		280		285
Gly	Gln	Ser	Arg	Leu	Ser	Tyr
		290		295		300
Ser	Trp	Ala	Thr	His	Pro	Val
305					310	
					315	
						320
Ser	Ser					

<210> 1437
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 1437
 cgggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
 60
 aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccgtt gactcgtgga
 120
 cccgtaccct catgacctcg atgcaacttc cacggtgggtc caccgatcac atcgaccgct
 180
 cgggtccatgt cgatgctgag cagttcgacc ggttgccgag cgagttcctg tcccgtgggc
 240
 acagttcttg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
 300
 cgcggcttct ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
 360
 tgccgcacgc gt
 372

<210> 1438
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 1438
Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1 5 10 15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
20 25 30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
35 40 45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50 55 60

<210> 1439
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1439
 accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
 60
 tgcttctttc cacaatgtag acttaaaaaa atgccgtaa acattttacc atatgattga
 120
 gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt
 180
 cgcggaaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
 240
 ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc
 300
 agtgggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc tttggcagat
 360
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
 420
 cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c
 471

<210> 1440
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1440
 Met Gly Gly Glu Ser Arg Lys Tyr Thr Gly Gln Ala Val Arg Tyr His
 1 5 10 15
 Asp Val Leu Ser His Phe Cys Leu Trp Ser Val Phe Leu Gly Asn Val
 20 25 30
 Thr Trp Arg Pro Arg Gly Ser Ala Ile Ser Cys Val Gln Trp Val Asn
 35 40 45
 Lys Thr Thr Gly Asn Phe Arg Val Gln Ala Val Leu Ile Phe Gly Arg
 50 55 60
 Phe Cys Ile Cys Thr Phe Thr His Ser Leu Lys Cys Ile Cys Asn Pro
 65 70 75 80
 Lys Ile Asn Thr Ala Val Ser Gln Ser Phe Ser Asp Thr Gly Arg Gly
 85 90 95
 Val Lys Ile Leu Ser
 100

<210> 1441
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1441
 nnnagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcagc
 60
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
 120
 accgcagctc aacttcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
 180
 cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctcactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgcca caactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg
 120
 gaagccgcta cgacttctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

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<210> 1445
 <211> 294
 <212> DNA
 <213> Homo sapiens

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<400> 1445
naccggttca cgggggaggc cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcggttcg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtctttcg agccgggtca
180
gaggtttatg agctggccnt ccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
aggggtggacc cgcacaacac cgtcgacaag ctgccaaacac tcggcgagcg cctg
294

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<210> 1446
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 1446
Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

<210> 1447
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1447

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
 60
 ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
 120
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
 180
 ctctacgggg ctggcgggtgc cgaccaggtt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttcgccgccg tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1			5						10				15		
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
		20					25					30			
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
	35					40					45				
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
	50				55				60						
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70				75					80		
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85				90					95			
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
		100				105						110			
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
	115					120									

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

aggcgtacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
 60
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcgggttg
 120
 ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga
 180
 ttgaggcaac cgtcgtcatc gatgggtgtca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgagggt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1450
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile
 1 5 10 15
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val
 20 25 30
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile
 35 40 45
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn
 50 55 60
 Ala His Leu Val Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe
 65 70 75 80
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly
 85 90 95
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp
 100 105 110
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu
 115 120 125
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys
 130 135

<210> 1451
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1451
 aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgcaact cctgtgggag actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaaccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1452
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
1 5 10 15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
20 25 30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
35 40 45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
50 55 60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65 70 75 80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
85 90 95

<210> 1453
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1453
cggccgcgcg gcccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc
60
cccgtcccc gcaaactcc aggccggaga gctccggcca aggccgctgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactcgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

<210> 1454
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1454
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
1 5 10 15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
20 25 30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
35 40 45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

50 55 60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
65 70 75 80
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
85 90 95
Thr Asp

<210> 1455
<211> 314
<212> DNA
<213> Homo sapiens

<400> 1455
gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaagggtac tttgttggtg
60
gttgctatgg ctacagtga tgctatgata gcagaatatg gctgccgttt ggaaaaactt
120
tggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
180
gaggcatttc ataattctca tcctgcatgt gtacaactat ttgattcacc aaatccctgt
240
atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
300
ccttccaaac tgac
314

<210> 1456
<211> 104
<212> PRT
<213> Homo sapiens

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1 5 10 15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
20 25 30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
35 40 45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
50 55 60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65 70 75 80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
85 90 95
Cys Phe Leu Pro Pro Ser Lys Leu
100

<210> 1457
<211> 437
<212> DNA
<213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgcccaga accttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtggggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aatccagcc cacaaccaag tcactgggct gcctaccac tgcccaagtg cctcaagtca
 420
 acacattcct gcactgn
 437

<210> 1458
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1458
 Met Ser Ala Glu Lys Gln Thr Lys Ser Ala Leu Ala Cys Pro Tyr Thr
 1 5 10 15
 Leu Pro Arg Lys Arg Ser Pro Cys Ala Lys Ser Thr Ala Pro Arg Gly
 20 25 30
 Ser Pro Leu Thr Ala Leu Phe Arg Val Gly Asp Thr Gly Ser Pro Arg
 35 40 45
 Leu His Gly Gly Asp Gly His Thr Tyr Arg Asp Cys Gln Ser Pro Phe
 50 55 60
 Trp Glu Ser Asp Trp Asn Leu Tyr Ser Arg Ser Thr Gly His Ser Asp
 65 70 75 80
 Asn Ser Ser Pro Gln Pro Ser His Trp Ala Tyr Pro Leu Pro Lys
 85 90 95
 Cys Leu Lys Ser Thr His Ser Cys Thr
 100 105

<210> 1459
 <211> 295
 <212> DNA
 <213> Homo sapiens

<400> 1459
 ngagagggtca ccggccacga gattcccgcg gaggtcgcgc ccgcgcgcgc gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgctcgagcat gccctcccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaat tggaaagagg ttggtgcatt atcccgtgaa
 180
 gaagcacaaa ttcgcggtga agcgcttaat ctaacgcctt atgatgcat gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaagggt aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgtagtaa aagcagcaat cagaatctat cattatgcc
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttgat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

65		70		75		80									
Phe	Glu	Pro	Gly	Thr	Thr	Thr	Val	Ser	Leu	Asn	Thr	Leu	Phe	Ser	Lys
				85					90					95	
Val	Lys	Thr	Trp	Leu	Pro	Thr	Leu	Ile	Glu	Lys	Ala	Leu	Glu	Lys	Gln
			100					105					110		
Gln	Ser	Glu	Ser	Ile	Ile	Met	Pro	Ser	Gly	Thr	Phe	Ser	Thr	Ala	Asn
		115				120						125			
Gln	Lys	Ala	Leu	Gly	Leu	Glu	Ile	Met	Lys	Leu	Leu	Lys	Phe	Asp	Phe
	130					135					140				

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
 60
 gccaaagtca tgggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
 120
 gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
 180
 gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
 240
 ctgcacaacc tgtggaaact gcgcgagtag atctcggaga ctatttccca ctggacgccc
 300
 tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
 360
 gcgatcgtcg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
 420
 a
 421

<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

Xaa	Ala	Phe	Gln	Ser	Lys	Leu	Asp	Leu	Thr	Ala	Phe	Glu	Phe	Phe	Ser
1				5				10						15	
Asp	Lys	Ala	Leu	Ala	Lys	Val	Met	Gly	Arg	Gly	Asp	Val	Pro	Ala	Pro
			20					25					30		
Phe	Glu	Thr	Glu	Cys	Pro	Phe	Tyr	Ala	Leu	Leu	Glu	Phe	Glu	Ala	Thr
		35					40					45			
Thr	Glu	Glu	Val	Ala	Asn	His	Ala	Leu	Glu	Thr	Phe	Glu	His	Cys	Val
	50					55				60					
Glu	Gln	Gly	Trp	Val	Leu	Asp	Gly	Val	Met	Ser	Gln	Ser	Glu	Thr	Gln
65					70					75				80	
Leu	His	Asn	Leu	Trp	Lys	Leu	Arg	Glu	Tyr	Ile	Ser	Glu	Thr	Ile	Ser
		85						90					95		
His	Trp	Thr	Pro	Tyr	Lys	Asn	Asp	Ile	Ser	Val	Thr	Val	Ser	Lys	Val
		100					105					110			
Pro	Ala	Phe	Leu	Lys	Glu	Ile	Asp	Ala	Ile	Val	Val	Ser	Ile	Thr	Arg

115 120 125
Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
130 135 140

<210> 1465
<211> 424
<212> DNA
<213> Homo sapiens

<400> 1465
gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggg agatggcatg
60
cagcctctcg ggcgggaaag tggctctacag tgcttgcttg cccgggcagg cagctcgtag
120
gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca
180
caacctcacc gaattcaaac tccggtggat ttcccacgcc gagcagtgga aggcggaaaa
240
ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
300
gaccttggcc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact
360
cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
420
cacg
424

<210> 1466
<211> 124
<212> PRT
<213> Homo sapiens

<400> 1466
Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
1 5 10 15
Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
20 25 30
Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
35 40 45
Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
50 55 60
Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
65 70 75 80
Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
85 90 95
Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
100 105 110
Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
115 120

<210> 1467
<211> 441
<212> DNA
<213> Homo sapiens

<400> 1467
 nacgcgtgac ggcgaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aacttttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgctgtgct gatggctatg acaacgtgga atgccacgat cctaggcccg
 240
 gccaaactcgg tgcattgagaa ccgcatatac tgccctgcgcc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgctgagat ttggttcag acgcgcatca acttgccgtg cgtcgatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1468
 Met Ala Gln Val Pro Arg Asn Phe Arg Leu Leu Glu Glu Leu Glu Lys
 1 5 10 15
 Gly Glu Lys Gly Leu Gly Asn Gly Ser Cys Ser Tyr Gly Leu Ala Asn
 20 25 30
 Ser Asp Asp Ile Arg Thr Tyr Ala Pro Val Leu Met Val Met Thr Thr
 35 40 45
 Trp Asn Ala Thr Ile Leu Gly Pro Ala Asn Ser Val His Glu Asn Arg
 50 55 60
 Ile Tyr Cys Leu Arg Leu Val Cys Gly Asp Ser Tyr Pro Leu Val Pro
 65 70 75 80
 Pro Glu Ile Trp Phe Gln Thr Arg Ile Asn Leu Pro Cys Val Asp Ala
 85 90 95
 His Thr Gly Arg Val Met Pro Asp Gln Phe Ser Pro Leu Leu His Trp
 100 105 110
 Arg Asp Glu Tyr Thr Met Glu Ser Cys Cys Met
 115 120

<210> 1469
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 1469
 nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggctctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttggtgt cgtaatcgca
 360
 gggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1470
 Xaa Leu Asp Leu Val Tyr Gly Leu Asn Asp Arg Pro Asn Pro Phe Ile
 1 5 10 15
 Ala Phe Leu Ala Ala Leu Gln His Leu Leu Ala Ile Leu Val Pro Ile
 20 25 30
 Val Thr Xaa Gly Leu Leu Ile Cys Leu Ala Leu Gly Val Ser Arg Glu
 35 40 45
 Asp Thr Asn Met Ile Leu Ser Met Ser Leu Ile Ile Ser Gly Ile Ala
 50 55 60
 Thr Phe Leu Gln Cys Lys Lys Val Gly Pro Phe Gly Ala Gly Leu Leu
 65 70 75 80
 Ile Val Gln Gly Thr Ser Phe Asn Phe Ile Gly Pro Ile Ile Gly Ile
 85 90 95
 Gly Ser Ser Met Val Ala Ala Gly Thr Pro Val Glu Gln Val Met Ala
 100 105 110
 Ala Ile Phe Gly Val Val Ile Ala Gly Ser Phe Ile Glu Met Gly Val
 115 120 125
 Ser Gln Ile Leu Pro Trp Val Lys Lys Leu Ile Thr Pro Leu Val Thr
 130 135 140
 Gly Ile Val Val Leu Leu Ile Gly Leu Pro Leu Met
 145 150 155

<210> 1471
 <211> 341
 <212> DNA
 <213> Homo sapiens

<400> 1471
 gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttgct gtggctcggc
 60
 gttatcgatc agccgctgac gattttgcac accaatctgg cggtgtatat cggcattgtg
 120
 tacgcttate tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtgg aggcctcact ggatctcggg gcccgccgc tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattatc gcggggtcga tgctggtgtt tatcccggcg
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tggtgttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgcctcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttccacca
300
gctccacctt tttataagca atttgggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

20 25 30
 His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
 35 40 45
 Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
 50 55 60
 Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
 65 70 75 80
 Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
 85 90 95
 His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
 100 105 110
 Arg

<210> 1475
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 1475
 accggtgccg gagecgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
 60
 gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
 120
 ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgcc aggcgcgggt
 180
 agtccaggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcggca
 240
 tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
 300
 ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tccccgccgt atggggaggg
 360
 ggataaccgg agcttgacgg ggtggtgtc
 389

<210> 1476
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1476
 Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
 1 5 10 15
 Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
 20 25 30
 Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
 35 40 45
 Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
 50 55 60
 Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
 65 70 75 80
 Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
 85 90 95
 Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120

<210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1477
 tacagcgaga atctgcacga taccacttc ctcaaacct attgcgttgg cttcgagcaa
 60
 ttcctccctt atttgcctggg ccaaacggac ggccaaccta aagatgccca atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcggccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg
 240
 tggatgacgg tagtgctggc ggcgatgctt ggccaaatcg gcttaccggg cggcgggttc
 300
 ggttttgggtt ggccctccaa cggcgcaggt acccccagagc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgc tacgccggca cgccatgcc aaggggattt caaagggttac
 420
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145 150 155 160
Asp Trp Asn Gly Lys Arg
 165

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
acgcgtgtgg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac
60
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca
120
cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgcagtg tccgggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac
240
aaatgccaag tttgacaaaa aacagtgaaa taaagcaaaa gattttgaaa aatgcttcat
300
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gcccgacctg
360
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
1 5 10 15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
20 25 30
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser
35 40 45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
50 55 60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
65 70 75 80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
85 90 95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
100 105 110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
115 120 125
Glu Asn Tyr Ile Arg
130

<210> 1481
<211> 545

<212> DNA

<213> Homo sapiens

<400> 1481

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca
 60
 tccggatgca gatgggagag ttggccacgc gcgattatct gcgctcggag ctacgcgacg
 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgacccggt
 180
 tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaaccagc tgggtaaggc cattgccgat gcgttgctgc acgtcaatga ccccgagatc
 300
 aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
 360
 gctttcgtcc gcctcctgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggtgtgctg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
 accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
 540
 cgcgt
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
1				5					10					15	
His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20					25						30		
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
		35					40					45			
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
		50				55					60				
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65					70					75				80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
				85					90					95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa
 60

ttggaggttaa agctggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
120
gcacccctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
180
ggcggctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
240
tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
300
cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttcctgac
360
agcaccaaga gcgagtgcc actcttctac atccctccag gctccaccac cccggtgctc
420
tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc
480
agtgtgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctggtgct
540
aatcctggag catgacacac caatcccaa gcacttgac accccgggca gcaatgggcg
600
ctactacgga gagaagacaa cgcgt
625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50				55					60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90					95		
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100				105						110		
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130				135						140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145				150				155						160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165				170						175		
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

ntatgttcag cgttcaacga tattggctac cactatgggtg ccatggtcgt cgatgctgcg
60
ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttactttctga atcaccgtct aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcgttaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aagggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaaagaa ctgcgaccga tagcttttga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcacccct ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcca aaaaattata atgaggcgta tcacttaacg
660
ggtgatgggtg ttgtagtgcc gggtgtatcc cacatagcca ctcatatttt tgacccagtg
720
atggagcgtg tgtttgagga tgcggcggga ctgcttaagc aaatcgcata gcacgttttt
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggcctctttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaatt tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggtgcctt gatggcaata
1140
acactaacat ctttgatcgc cccctcagg cagaagaatt tgttatctgg agtgtatgca
1200
caaatcctgg tgctgacct cagcataatg tttggtctgg gcttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggc catttgggac tgggcttgtg
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaatt aaagcgtttc
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatc
 1560
 atggtaaaga taccgcccggt aaaacgacta tcattcgaaa cggcatgggtg gagcgtgaat
 1620
 cggaaatgac ggcaataagg cggctcttaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
 tgatcgtttg aggatcgttt ttgctgaggg ccgccagttc tgggtgggctt ttgcttatgt
 1740
 catgcacctg catgaaaacc gctacataaa gcgggcagggc gtggcgggga tacgagcgcg
 1800
 cgcaacgggg tgaaatgggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
 1860
 gggtaggggtg agtgagagggc agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagaggtg gtcttggtgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gccccagcgt gtacggctca aagcggtatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcagggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
1				5				10					15		
Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
			20					25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35					40					45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
	50					55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65				70					75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
		115					120					125			
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
	130					135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170					175		
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
		180					185						190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
	195					200					205				
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		
245	250	255

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
 acgcgtgagg ggaggggatg ctgggcagat cttgtgaggg aaaattcagg aaggacctct
 60
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggc ggtgaggtca ggcagggagg tgggtgagag gtcattggggc cgcaggcaaa
 300
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
 360
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagccctttc tcctggggac
 420
 tgggagaggg cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacagggcct ctcacggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
 540
 tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
 600
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
 660
 cccctacat tcctggggca cccactgtag gccaggccct gtgccggatc tgatgatata
 720
 gtgatgacta agtcacagtc cctgcctctg agggcccat gatgtgccgg gacagccaag
 780
 caaccaata tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

50 55 60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65 70 75 80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
85 90 95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
100 105 110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
115 120 125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
130 135 140
Ala Leu Gly Arg Ala
145

<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

nnccagttca ccgtcaagct ggccgcggcc ggccaacaca atgtgcgcaa tgcgctggcc
60
gcgattgcct gcgccgtggg tgccggcatc aaccaggacg ccacgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtacccg cgccgcgcat cctggtggtg ggcgacatgg gcgaagtcgg cgcacaggga
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
1 5 10 15
Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
20 25 30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
35 40 45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
50 55 60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65 70 75 80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
85 90 95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
100 105 110
Thr Arg

<210> 1491
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1491
ncctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac
60
atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca
120
tgggggtcag gtcccaactcc caaaggagta gccatcaccc acgagtcggc ggtcaatacg
180
attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
240
gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc
300
ttggtgttgc catctccagc agacaaacgt gat
333

<210> 1492
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1492
Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
1 5 10 15
Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
20 25 30
Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
35 40 45
Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
50 55 60
Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
65 70 75 80
Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
85 90

<210> 1493
<211> 1316
<212> DNA
<213> Homo sapiens

<400> 1493
nggtaccagg gcaaagaagg ctgggcccc gcctcctacc taaagaagaa cagtggggag
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cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttgat
120
gggtgtttccc ggcagcagaa cgcgggtggc agggagaagg agctgctcag cagccagagg
180
gacgggagggt ttgaaggccg cccgggtgcc gacggtgacg ccaagcagag atcaccaaag
240

atgaggcaga gacccccctcc tcgcccgggac atgaccattc ctcgaggcct caacctgccg
300
aagccgcccc tcccgcccca agtggaggaa gagtattaca ccatcgccga attccagaca
360
accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggatgat cgagaaaaac
420
ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
480
attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tcccctgcc
540
cacgaggatga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
600
gaagccacgg gccctcccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg
660
ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac
720
atgtctgcgt cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc
780
ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
840
gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg
900
ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaa
960
cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
1020
gtcttggcca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
1080
ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
1140
gttagggcaa aaccagctcc ttcccccaaa acggagccac ctcagggcga agaccaagtc
1200
gacatctgca acctcaggag taagctcagg cctgccaagt cccaagacaa gtccttgttg
1260
gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5				10						15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35					40					45		
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
			50				55				60				
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

85 90 95
Leu Asn Leu Pro Lys Pro Pro Ile Pro Pro Gln Val Glu Glu Glu Tyr
100 105 110
Tyr Thr Ile Ala Glu Phe Gln Thr Thr Ile Pro Asp Gly Ile Ser Phe
115 120 125
Gln Ala Gly Leu Lys Val Glu Val Ile Glu Lys Asn Leu Ser Gly Trp
130 135 140
Trp Tyr Ile Gln Ile Glu Asp Lys Glu Gly Trp Ala Pro Ala Thr Phe
145 150 155 160
Ile Asp Lys Tyr Lys Lys Thr Ser Asn Ala Ser Arg Pro Asn Phe Leu
165 170 175
Ala Pro Leu Pro His Glu Val Thr Gln Leu Arg Leu Gly Glu Ala Ala
180 185 190
Ala Leu Glu Asn Asn Thr Gly Ser Glu Ala Thr Gly Pro Ser Arg Pro
195 200 205
Leu Pro Asp Ala Pro His Gly Val Met Asp Ser Gly Leu Pro Trp Ser
210 215 220
Lys Asp Trp Lys Gly Ser Lys Asp Val Leu Arg Lys Ala Ser Ser Asp
225 230 235 240
Met Ser Ala Ser Ala Gly Tyr Glu Glu Ile Ser Asp Pro Asp Met Glu
245 250 255
Glu Lys Pro Ser Leu Pro Pro Arg Lys Glu Ser Ile Ile Lys Ser Glu
260 265 270
Gly Glu Leu Leu Glu Arg Glu Arg Glu Arg Gln Arg Thr Glu Gln Leu
275 280 285
Arg Gly Pro Thr Pro Lys Pro Pro Gly Val Ile Leu Pro Met Met Pro
290 295 300
Ala Lys His Ile Pro Pro Ala Arg Asp Ser Arg Arg Pro Glu Pro Lys
305 310 315 320
Pro Asp Lys Ser Arg Leu Phe Gln Leu Lys Asn Asp Met Gly Leu Glu
325 330 335
Cys Gly His Lys Val Leu Ala Lys Glu Val Lys Lys Pro Asn Leu Arg
340 345 350
Pro Ile Ser Lys Ser Lys Thr Asp Leu Pro Glu Glu Lys Pro Asp Ala
355 360 365
Thr Pro Gln Asn Pro Phe Leu Lys Ser Arg Pro Gln Val Arg Pro Lys
370 375 380
Pro Ala Pro Ser Pro Lys Thr Glu Pro Pro Gln Gly Glu Asp Gln Val
385 390 395 400
Asp Ile Cys Asn Leu Arg Ser Lys Leu Arg Pro Ala Lys Ser Gln Asp
405 410 415
Lys Ser Leu Leu Asp Gly Glu Gly Pro Gln Ala Val Gly Gly Gln Asp
420 425 430
Val Ala Phe Ser Arg Ser
435

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tcttccatga gagctgtgct ttgetttctt

60

ctggaggctg caaggaggat ggccccatc acggcggacc tacatgctgg gagtccggga
 120
 gagggcaggc cgcggacatg gggcatgtgg cgatgtgttt caccaccac tcccgctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc
 240
 agaccacct cctcagcctc cttccctga aggctgggca tggcctggac aaaggggtgc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1496
 Met Ala Gln Gln Arg Arg Thr Pro Phe Val Gln Ala Met Pro Ser Leu
 1 5 10 15
 Gln Gly Lys Glu Ala Glu Glu Val Gly Leu Leu Gln Glu Pro Gly Val
 20 25 30
 Gln Pro Ser Leu Ala Pro Trp Val Gly Leu Thr Val Ala Leu Gln Ala
 35 40 45
 Gly Val Gly Gly Glu Thr His Arg His Met Pro His Val Arg Gly Leu
 50 55 60
 Pro Ser Pro Gly Leu Pro Ala Cys Arg Ser Ala Val Met Gly Ala Ile
 65 70 75 80
 Leu Leu Ala Ala Ser Arg Arg Lys Gln Ser Thr Ala Leu Met Glu Asp
 85 90 95
 Glu Val Ala Pro Leu Arg Asp Arg Asp
 100 105

<210> 1497
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 1497
 naacttcttg cactcactca ggcgacagggt tggcggccga cttggaagcc gctgcagcac
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 ttgacgcggg gcgatctcga agcggttcgggt cttggcctga cggtcgatgg ctgcggcgtg
 120
 ccgttgatcg cgcgaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atcccgcagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgcccgatg cacgtcattc tttcggggcca cgcgt
 345

<210> 1498
 <211> 104
 <212> PRT

<213> Homo sapiens

<400> 1498

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Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
          20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
          35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
          50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ser Lys
          85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
          100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aatatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
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agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
          20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
          35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
          50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
          85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
          100          105          110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
          115          120          125
Pro Ala Ser Thr Leu Ser
          130

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<210> 1501
 <211> 362
 <212> DNA
 <213> Homo sapiens

```

<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttctg
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gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcgggaca tctactccac gggcatcacc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggcgc cccatcaage
360
tt
362

```

<210> 1502
 <211> 120
 <212> PRT
 <213> Homo sapiens

```

<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
          20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
          35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
          50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
          85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
          100          105          110
Leu Arg Glu Gly Arg Pro Ser Ser
          115          120

```

<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
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 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgacccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgta gtggtgccag
 360
 attcacgggt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttggcgg actcacccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccgggggc cctcgaccgg atcttcttgg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaactg ctcgcaccgc agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

145 150 155 160

Leu Thr Arg Thr Arg
165

<210> 1505
<211> 556
<212> DNA
<213> Homo sapiens

<400> 1505
nnngcgcgccg gtcacctcaac accaccctga cttcgaaata tctggagaat gtctacgttg
60
gtttcaatcg gtttgccgaa cagatggcca ggatggccgg cgcctcggcg aaactggacg
120
acggggggccc cgaaactcgc tgacggcact aaaccttctt cccccggcgc aaccaccttg
180
gtttccngca tgacgaagct cagcggggga gctcagcggg tgtcagctaa cggcggcaag
240
ctcaccgacg gtgtctccca gctctccgga gggctcacia ccttgtctca caagggccag
300
cagctcagcc aagggggccga tgggctggcc agcgggggtgg cgacctacac cgatggcacg
360
gggaaggtcg tcgacggcat cgggcagctg tcggctgggt tgacgacgat ggatgagaag
420
atcgctgcgg ctaccgggaa aatcgatccc tcccagctcg acaaactcgc cgggtggggcc
480
ggacagcttg ctgatggcat cgaccagttc accggcaatc tgggtgggtta tcgtactgag
540
atccgccagt acgcgt
556

<210> 1506
<211> 169
<212> PRT
<213> Homo sapiens

<400> 1506
Met Ser Thr Leu Val Ser Ile Gly Leu Pro Asn Arg Trp Pro Gly Trp
1 5 10 15
Pro Ala Pro Arg Asn Trp Thr Thr Gly Ala Pro Lys Leu Ala Asp
20 25 30
Gly Thr Lys Pro Ser Ser Pro Gly Ala Thr Thr Leu Ala Ser Xaa Met
35 40 45
Thr Lys Leu Ser Gly Gly Ala Gln Arg Leu Ser Ala Asn Gly Gly Lys
50 55 60
Leu Thr Asp Gly Val Ser Gln Leu Ser Gly Gly Leu Thr Thr Leu Ser
65 70 75 80
His Lys Gly Gln Gln Leu Ser Gln Gly Ala Asp Gly Leu Ala Ser Gly
85 90 95
Val Ala Thr Tyr Thr Asp Gly Thr Gly Lys Val Val Asp Gly Ile Gly
100 105 110
Gln Leu Ser Ala Gly Leu Thr Thr Met Asp Glu Lys Ile Ala Ala Ala
115 120 125
Thr Gly Lys Ile Asp Pro Ser Gln Leu Asp Lys Leu Ala Gly Gly Ala

130 135 140
 Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly
 145 150 155 160
 Tyr Arg Thr Glu Ile Arg Gln Tyr Ala
 165

<210> 1507
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1507
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 ccagttacct ccacttgctc tgcccttggc acgtggggct tatggggatt acaattcaag
 120
 gtgagacttg ggtggggaca cagtgggaaca tgaagtgtgc cacgctgggt ggatgacgcc
 180
 ctctctcccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
 240
 aagggcagaa tgtacaggaa cagagtgaga ttcgcagggc ctggggctga gggaggggac
 300
 gcactagagg aaggcaaagg ggagcctcct ggggtgtggg agcactttct gtcttggttt
 360
 tgggtggtggc tgcacagtgg cccacacccg tcagagctca cctgcctgca cccaggccct
 420
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
 480
 cgcaccggta cctggggacc gggggtcctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggaggggtt tgggtgctgg gtgcccgcct cctattgctc
 600
 ctgcagactc tggggctctc ggcgccccca gtggggcaat gtgggctgct gcagggaact
 660
 cacgcgt
 667

<210> 1508
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1508
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
 1 5 10 15
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

<212> DNA

<213> Homo sapiens

<400> 1511

gccggcaccg gcgtaaggc catggcgctg ggcccgggat gggtacacac cgaattccac
60
tcacgcgcca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
120
ctggtacgcy aggtctctca cgaccttgac catgacaagg tagtatccat tctacccccg
180
ctctggaagt tcttcacgcy agtggccaca cataccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggagggc
300
gaggcctgag atggccagcy tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgcccgc acgcggcagg cagcgaacat gcttctgctg cgtccttttg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacgggtg ccttacgctg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc
540
ggctgtcaaa gtacctagct accgggggccc ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

Ala	Gly	Thr	Gly	Val	Lys	Ala	Met	Ala	Leu	Gly	Pro	Gly	Trp	Val	His
1				5					10					15	
Thr	Glu	Phe	His	Ser	Arg	Ala	Asn	Val	Thr	Gly	Asn	His	Leu	Pro	Asp
			20					25					30		
Phe	Phe	Trp	Ile	Asp	Ala	Glu	Val	Leu	Val	Arg	Glu	Ala	Leu	Asn	Asp
			35					40					45		
Leu	Asp	His	Asp	Lys	Val	Val	Ser	Ile	Pro	Thr	Pro	Leu	Trp	Lys	Phe
			50				55				60				
Phe	Ile	Ala	Val	Ala	Thr	His	Thr	Pro	Arg	Ser	Ala	Met	Arg	Phe	Leu
65					70					75				80	
Ser	Arg	Thr	Leu	Ser	Ser	Ser	Arg	Asp	Lys	Asp	Asp	His	Pro	Arg	His
					85				90					95	
Thr	Pro	Gly	Gly	Glu	Ala										
					100										

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

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 60
 ttggctgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tcctgacacg
 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc
 180
 ttctgggata ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccc
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag
 300
 tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactggtgg gagtgagggg
 360
 tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g
 401

<210> 1514
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1514
 Met Phe Asp Lys Gly Pro Glu Gln Thr Ala Asp Asp Ala Asp Asp Ala
 1 5 10 15
 Ala Gly His Lys Ser Phe Ile Ser Ala Thr Val Gln Thr Gly Phe Cys
 20 25 30
 Asp Trp Ser Ala Arg Leu Phe Tyr Pro Ala Arg His Glu Asp Pro Arg
 35 40 45
 Arg Ala Arg Pro Gly Glu Ser Asp Pro Gln Gly Ala Gly Val Ala Val
 50 55 60
 Pro Ala Lys Gln Pro Cys Gln Glu Ala Gly Pro Ala Ser His Ser Glu
 65 70 75 80
 Gly His Tyr Glu Ile Gly Arg Pro Asn Ile Ser Glu Gln Glu Pro Arg
 85 90 95
 Arg Pro Leu Cys Gly Glu Ile Pro Pro Leu His Ala
 100 105

<210> 1515
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 1515
 nnggatectg accgcggcat gaggttcaac cctgccaaagc tattgctcga cccttatgcc
 60
 agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtcc cgctcgccgt cgtcattgac
 180
 gatccccgcc cgctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacccatg tcaaagggt aaccgcctt cccccctcg ttctgagca tcttcgcagc
 300
 acctatgccg ggcttgcccta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca
 360

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<210> 1516
 <211> 240
 <212> PRT
 <213> Homo sapiens

<400> 1516
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 Asp Pro Tyr Ala Arg Ala Ile Thr Ala Gly Val Asp Tyr His Gly Pro
 20 25 30
 Ile Met Asp His Thr Pro Glu Ser Asn Tyr Glu Pro Asp Leu Thr Asp
 35 40 45
 Asp Ala Thr Ser Val Pro Leu Ala Val Val Ile Asp Asp Pro Gly Pro
 50 55 60
 Pro Thr Pro Ile Ala Arg Arg His Asp Ile Ser Glu Ser Gly Ile Tyr
 65 70 75 80
 Glu Thr His Val Lys Gly Leu Thr Arg Leu His Pro Leu Val Pro Glu
 85 90 95
 His Leu Arg Ser Thr Tyr Ala Gly Leu Ala Tyr Pro Ala Val Ile Glu
 100 105 110
 His Leu Lys Ser Ile Gly Val Thr Ala Ile Glu Leu Leu Pro Val Gln
 115 120 125
 Gln Phe Val Ser Glu Pro Phe Ile Val Gly Arg Gly Leu Ser Asp Tyr
 130 135 140
 Trp Gly Tyr Asn Thr Leu Gly Phe Phe Ala Pro His Ala Ala Tyr Cys
 145 150 155 160
 Ser Val Gly Ser Met Gly Thr Gln Val Arg Glu Phe Lys Asp Met Val
 165 170 175
 Thr Ser Phe His Glu Ala Gly Ile Glu Val Phe Leu Asp Val Val Tyr
 180 185 190
 Asn His Thr Gly Glu Gly Gly His Glu Gly Pro Thr Leu Ser Phe Arg
 195 200 205
 Gly Ile Asp His Glu Ser Tyr Tyr Arg Leu Thr Asn Asp His Arg Asn
 210 215 220
 Asp Tyr Asp Val Thr Gly Cys Gly Asn Ser Val Asp Thr Ser His Pro
 225 230 235 240

<210> 1517
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 1517
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240
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360
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497

<210> 1518
<211> 165
<212> PRT
<213> Homo sapiens

<400> 1518
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Ser Gln Ser Asn Glu Ser Asp Asp Val Ser Thr Asp Arg Gly Pro Ala
20 25 30
Pro Pro Ser Pro Leu Lys Glu Thr Ser Phe Ser Ile Gly Leu Gln Val
35 40 45
Leu Phe Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ala Ala Gly Met
50 55 60
Val Leu Asp Ile Val Gln His Trp Glu Val Phe Gln Lys Val Thr Glu
65 70 75 80
Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu
85 90 95
Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met
100 105 110
Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu
115 120 125
Ile Gln Val Gln Ala Pro Val Val Gly Phe Leu Ala Ser Ile Ala Ala
130 135 140
Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala
145 150 155 160
Phe Leu Leu Cys Gly
165

<210> 1519
<211> 2076
<212> DNA
<213> Homo sapiens

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240
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300
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360
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420
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480
cctgtcgatt ttcaaaacgt tttggaagac ttcactaaac agggcttccg tgtgattgct
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600
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag
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720
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840
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900
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1320
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1440
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1500
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1560

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 1860
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 1920
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 1980
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 2040
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 2076

<210> 1520
 <211> 692
 <212> PRT
 <213> Homo sapiens

<400> 1520
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 20 25 30
 Ala Cys Met Ala Thr Cys His Ser Leu Thr Lys Ile Glu Gly Val Leu
 35 40 45
 Ser Gly Asp Pro Leu Asp Leu Lys Met Phe Glu Ala Ile Gly Trp Ile
 50 55 60
 Leu Glu Glu Ala Thr Glu Glu Thr Ala Leu His Asn Arg Ile Met
 65 70 75 80
 Pro Thr Val Val Arg Pro Pro Lys Gln Leu Leu Pro Glu Ser Thr Pro
 85 90 95
 Ala Gly Asn Gln Glu Met Glu Leu Phe Glu Leu Pro Ala Thr Tyr Glu
 100 105 110
 Ile Gly Ile Val Arg Gln Phe Pro Phe Ser Ser Ala Leu Gln Arg Met
 115 120 125
 Ser Val Val Ala Arg Val Leu Gly Asp Arg Lys Met Asp Ala Tyr Met
 130 135 140
 Lys Gly Ala Pro Glu Ala Ile Ala Gly Leu Cys Lys Pro Glu Thr Val
 145 150 155 160
 Pro Val Asp Phe Gln Asn Val Leu Glu Asp Phe Thr Lys Gln Gly Phe
 165 170 175
 Arg Val Ile Ala Leu Ala His Arg Lys Leu Glu Ser Lys Leu Thr Trp
 180 185 190
 His Lys Val Gln Asn Ile Ser Arg Asp Ala Ile Glu Asn Asn Met Asp
 195 200 205
 Phe Met Gly Leu Ile Ile Met Gln Asn Lys Leu Lys Gln Glu Thr Pro
 210 215 220
 Ala Val Leu Glu Asp Leu His Lys Ala Asn Ile Arg Thr Val Met Val

225					230					235					240	
Thr	Gly	Asp	Ser	Met	Leu	Thr	Ala	Val	Ser	Val	Ala	Arg	Asp	Cys	Gly	
				245					250					255		
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				260					265					270		
Lys	Asp	Gly	Lys	Val	Ala	Lys	Ile	Asn	Trp	His	Tyr	Ala	Asp	Ser	Leu	
				275					280					285		
Thr	Gln	Cys	Ser	His	Pro	Ser	Ala	Ile	Asp	Pro	Glu	Ala	Ile	Pro	Val	
				290					295					300		
Lys	Leu	Val	His	Asp	Ser	Leu	Glu	Asp	Leu	Gln	Met	Thr	Arg	Tyr	His	
				305					310					315		
Phe	Ala	Met	Asn	Gly	Lys	Ser	Phe	Ser	Val	Ile	Leu	Glu	His	Phe	Gln	
				325					330					335		
Asp	Leu	Val	Pro	Lys	Leu	Met	Leu	His	Gly	Thr	Val	Phe	Ala	Arg	Met	
				340					345					350		
Ala	Pro	Asp	Gln	Lys	Thr	Gln	Leu	Ile	Glu	Ala	Leu	Gln	Asn	Val	Asp	
				355					360					365		
Tyr	Phe	Val	Gly	Met	Cys	Gly	Asp	Gly	Ala	Asn	Asp	Cys	Gly	Ala	Leu	
				370					375					380		
Lys	Arg	Ala	His	Gly	Gly	Ile	Ser	Leu	Ser	Glu	Leu	Glu	Ala	Ser	Val	
				385					390					395		
Ala	Ser	Pro	Phe	Thr	Ser	Lys	Thr	Pro	Ser	Ile	Ser	Cys	Val	Pro	Asn	
				405					410					415		
Leu	Ile	Arg	Glu	Gly	Arg	Ala	Ala	Leu	Ile	Thr	Ser	Phe	Cys	Val	Phe	
				420					425					430		
Lys	Phe	Met	Ala	Leu	Tyr	Ser	Ile	Ile	Gln	Tyr	Phe	Ser	Val	Thr	Leu	
				435					440					445		
Leu	Tyr	Ser	Ile	Leu	Ser	Asn	Leu	Gly	Asp	Phe	Gln	Phe	Leu	Phe	Ile	
				450					455					460		
Asp	Leu	Ala	Ile	Ile	Leu	Val	Val	Val	Phe	Thr	Met	Ser	Leu	Asn	Pro	
				465					470					475		
Ala	Trp	Lys	Glu	Leu	Val	Ala	Gln	Arg	Pro	Pro	Ser	Gly	Leu	Ile	Ser	
				485					490					495		
Gly	Ala	Leu	Leu	Phe	Ser	Val	Leu	Ser	Gln	Ile	Ile	Ile	Cys	Ile	Gly	
				500					505					510		
Phe	Gln	Ser	Leu	Gly	Phe	Phe	Trp	Val	Lys	Gln	Gln	Pro	Trp	Tyr	Glu	
				515					520					525		
Val	Trp	His	Pro	Lys	Ser	Asp	Ala	Cys	Asn	Thr	Thr	Gly	Ser	Gly	Phe	
				530					535					540		
Trp	Asn	Ser	Ser	His	Val	Asp	Asn	Glu	Thr	Glu	Leu	Asp	Glu	His	Asn	
				545					550					555		
Ile	Gln	Asn	Tyr	Glu	Asn	Thr	Thr	Val	Phe	Ile	Ser	Ser	Phe	Gln		
				565					570					575		
Tyr	Leu	Ile	Val	Ala	Ile	Ala	Phe	Ser	Lys	Gly	Lys	Pro	Phe	Arg	Gln	
				580					585					590		
Pro	Cys	Tyr	Lys	Asn	Tyr	Phe	Phe	Val	Phe	Ser	Val	Ile	Phe	Leu	Tyr	
				595					600					605		
Ile	Phe	Ile	Leu	Phe	Ile	Met	Leu	Tyr	Pro	Val	Ala	Ser	Val	Asp	Gln	
				610					615					620		
Val	Leu	Gln	Ile	Val	Cys	Val	Pro	Tyr	Gln	Trp	Arg	Val	Thr	Met	Leu	
				625					630					635		
Ile	Ile	Val	Leu	Val</												

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Gly Glu Tyr Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp
675 680 685
Arg Trp Gly Lys
690

<210> 1521
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1521
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120
gcgtaccatc cgatacacgc cagccttgac tgctgatata cccagccac tgcgcatcag
180
tgatttcaat ggcgggttaca cagtctggta tcggactgtc gatatcatcg taataggcga
240
tcacattccc atttgcacg tatgctgcga acttttgacc catgattatt atttcccgaa
300
tgcaaaccaa taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
360
gagtggcgtc gac
373

<210> 1522
<211> 94
<212> PRT
<213> Homo sapiens

<400> 1522
Met Gly Gln Lys Phe Ala Ala Tyr Asp Ala Asn Gly Asn Val Ile Ala
1 5 10 15
Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
20 25 30
Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
35 40 45
Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
50 55 60
Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
65 70 75 80
Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
85 90

<210> 1523
<211> 525
<212> DNA
<213> Homo sapiens

<400> 1523
nnacgcgtgc ggtcaatatg ccgccattcc cataagecgt tgggtggcatg tttccagggc
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cagcatggca ccgatgccga gaggagacac aaaaaactgc ctctgacagc tcttgctcaa
120
aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
180
tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttggtgag
240
aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
300
cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
360
caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
420
aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttcagca
480
gacatgtaca actttatggc caaagaaggg gagtatggca aattt
525

<210> 1524
<211> 175
<212> PRT
<213> Homo sapiens

<400> 1524
Xaa Arg Val Arg Ser Ile Cys Arg His Ser His Lys Arg Leu Val Ala
1 5 10 15
Cys Phe Gln Gly Gln His Gly Thr Asp Ala Glu Arg Arg His Lys Lys
20 25 30
Leu Pro Leu Thr Ala Leu Ala Gln Asn Met Gln Glu Ala Ser Thr Gln
35 40 45
Leu Glu Asp Ser Leu Leu Gly Lys Met Leu Glu Thr Cys Gly Asp Ala
50 55 60
Glu Asn Gln Leu Ala Leu Glu Leu Ser Gln His Glu Val Phe Val Glu
65 70 75 80
Lys Glu Ile Val Asp Pro Leu Tyr Gly Ile Ala Glu Val Glu Ile Pro
85 90 95
Asn Ile Gln Lys Gln Arg Lys Gln Leu Ala Arg Leu Val Leu Asp Trp
100 105 110
Asp Ser Val Arg Ala Arg Trp Asn Gln Ala His Lys Ser Ser Gly Thr
115 120 125
Asn Phe Gln Gly Leu Pro Ser Lys Ile Asp Thr Leu Lys Glu Gly Met
130 135 140
Asp Glu Ala Gly Asn Lys Val Glu Gln Cys Lys Asp Gln Leu Ala Ala
145 150 155 160
Asp Met Tyr Asn Phe Met Ala Lys Glu Gly Glu Tyr Gly Lys Phe
165 170 175

<210> 1525
<211> 294
<212> DNA
<213> Homo sapiens

<400> 1525
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tggtccggcc tgctcgtgga ctatacctcg cagcacggcg tcgacgtttt ggtcaagggg
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ctgcgttctt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcgttta
180
tctggcatcg atacggctctt ttgcttacc gatgaaaagt acggctacat cagctcatcg
240
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294

<210> 1526
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1526
Val His Glu Arg Met Asp Leu Ile Arg Gln Ser Val Asp Ala Arg Ile
1 5 10 15
Asn Val Asp Tyr Trp Ser Gly Leu Leu Val Asp Tyr Thr Ser Gln His
20 25 30
Gly Val Asp Val Leu Val Lys Gly Leu Arg Ser Ser Leu Asp Tyr Glu
35 40 45
Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp
50 55 60
Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser
65 70 75 80
Leu Cys Lys Gln Val Ala Gln Phe Gly Gly Glu Val Thr Gly Met Leu
85 90 95
Arg Ile

<210> 1527
<211> 371
<212> DNA
<213> Homo sapiens

<400> 1527
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gcttcaagga atacgccgag atggcctgga agattcccga gcattacaaa aacaaccgct
120
acttcgcctt ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg
180
aagacattga cgcgctgggt tacgacggtg tggtcgagga cggcatgacc atctgtgtgg
240
aaagctacat cggccacgac gacggcgggc aaggcgtgaa gctcgaagaa cagatctaca
300
tccacgaaca cagcatcgag ttgctctccg attatccgtt cgaccacgc ctgttgccgc
360
gctgaacgcg t
371

<210> 1528
<211> 109
<212> PRT

<213> Homo sapiens

<400> 1528

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Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
      20           25           30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
      85           90           95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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240
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360
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420
aggtgcactg ttccaattc ctcattcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtct caccactctg cgaggagcac agcctcttct ccaccgtcca
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600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

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Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala
20 25 30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser
35 40 45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val
50 55 60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala
65 70 75 80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu
85 90 95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala
100 105 110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu
115 120 125

<210> 1531
<211> 726
<212> DNA
<213> Homo sapiens

<400> 1531
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agcgttggac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccgc
120
acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt
180
cggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctc tcaggtggtc ttcgggctcg acttcgtctc cgttcccggc accttcccag
300
tgcgcatggc caggtggttc aagtcggggc ggatcagtca taccgctgcg ctcagctccg
360
gctttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggatttttagc
420
accccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
480
tcaccgagcg cggcggtttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcatccctt catacgcgag ccgccgatat ggcccccgag tgaggcccct cagttcgcgc
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<210> 1532
<211> 178
<212> PRT
<213> Homo sapiens

<400> 1532

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Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
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      20           25           30
Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
      35           40           45
Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
      50           55           60
Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
65           70           75           80
Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
      85           90           95
Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
      100          105          110
Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
      115          120          125
His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
      130          135          140
Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
145          150          155          160
Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
      165          170          175
Pro Glu

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<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

```

natatgctgg tcatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
60
gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg
120
gttaaaatgc acgtcggctt gccgttgacg gcggtcgggc ttatcggcga agacagcgat
180
ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
240
accacgtttg cccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc
300
tttttccatt cgctgcgcgc caatcgcttg ctcatctcc cgcctttga tcgactcgac
360
gcgt
364

```

<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

```

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

```

      1           5           10           15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20           25           30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35           40           45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50           55           60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65           70           75           80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85           90           95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100          105          110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115          120

```

<210> 1535
 <211> 369
 <212> DNA
 <213> Homo sapiens

```

<400> 1535
gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattcgc
60
caatccctgg ggcccgcggt gcgtgccggc cagcggccag tcctggcccga gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accggggccta tcgccgcggc ccatggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccgtt
360
actggccac
369

```

<210> 1536
 <211> 111
 <212> PRT
 <213> Homo sapiens

```

<400> 1536
Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
1           5           10           15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
20           25           30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
35           40           45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
50           55           60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
65           70           75           80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

				85						90					95
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe	
			100					105					110		

<210> 1537
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1537
 ccactcgcgg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
 60
 ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttgtt
 120
 cctcacgcgc cccggggaga tggtagggcca gctggccgtg ctcaccgagg agacctcgtc
 180
 ggcgtggtgg agacactgac ccaccaggcc cgggcgacca cggtagcatgc cgttcgggac
 240
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgcag gtac
 294

<210> 1538
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1538
 Pro Leu Ala Ala Pro Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His
 1 5 10 15
 Pro Val Arg Val Leu Gly Ala Ala Ala Arg Val Pro Ala Glu Asp Arg
 20 25 30
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly
 35 40 45
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu
 50 55 60
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp
 65 70 75 80
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg
 85 90 95
 Arg Tyr

<210> 1539
 <211> 1015
 <212> DNA
 <213> Homo sapiens

<400> 1539
 acgcgttcgg gcgtcaggca cagcatctc aacagatgtg gctgacaccc aaggcagtcg
 60
 gcctcagtgc cctgtcacc acctagaacc tgttcacagc atgtcatccg ggctgctctg
 120
 gccttgactg gacatgatta tttatcetta cacaccgtgg ctgctctaca ggccaagaaa
 180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct
240
gacgcatcct ggcctcacc taggcctcct ctgtcggggc agcctggctc agcagagccc
300
gggacacacg gctgaggcca cccaggctgg gccatcttgc ccctgttttg tgccccctac
360
tcagttctcc ttctgtcctg gctcaggctc aggccagtca agaggggtggc tgagaagcag
420
gaggagcctc agagaccctc ccctcgaaag cactgggggt tccacctcac aagcggcagg
480
ttcgcttttg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
540
gttgccgac catcgctccag gcctggccca ggagccggtg aggaacctgg ggctgttggtg
600
caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
660
ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
720
gcatccccag tctaattgggt gccctgcca ctctcctgag ttcccgtgca gagctcccc
780
caacacctca gccttcacct ttctcagtta atcaaaagat tcaaaaaaa gcaaaccat
840
cagaacggct tcctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
900
cagcccggat gacatgctat gaacagggtt taggtgggtg acagggcact gaggccgact
960
gccttgggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccga cgcgt
1015

<210> 1540
<211> 89
<212> PRT
<213> Homo sapiens

<400> 1540
His Pro Arg Gln Ser Ala Ser Val Pro Cys His Pro Pro Arg Thr Cys
1 5 10 15
Ser Gln His Val Ile Arg Ala Ala Leu Ala Leu Thr Gly His Asp Tyr
20 25 30
Leu Ser Leu His Thr Val Ala Ala Leu Gln Ala Lys Lys Gln Ala Ala
35 40 45
Gln Pro Gly Ser Gly Glu Gly Gly Ser Gly Ser Pro Gly Thr Ser Gly
50 55 60
Pro Asp Ala Ser Trp Pro His Pro Arg Pro Pro Leu Ser Gly Gln Pro
65 70 75 80
Gly Ser Ala Glu Pro Gly Thr His Gly
85

<210> 1541
<211> 1482
<212> DNA
<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaag ggaagcttag
60
cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc
120
gctatcgcg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga
180
gctgctggtg caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc
240
cagtgtgccg cgcctggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgcctgcccc
360
acaacgaaga caaagaggag ttcccgtgt gcgccttggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcacc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatgggtgctc caagaggcag cttgtggacc
600
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggatgtgta tgaaaaggaa gtgggtcaagt tctcagcctc acctgacctg gtccttcagt
780
ggactgagag gggctgccga caggctctcc acgtcttcac caactttggc aagggcaccc
840
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccactccagt gtgagggtca ggatccgtct gtcctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg
1020
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatctt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cacgacaggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattggt ttgttattca tttaatgact ttccctgctg ttacctaat acaaattgga
1380
tggaaactgtg tttttttctg ctttgttttt tcagtttget gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

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Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1           5           10           15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20           25           30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35           40           45
Glu Trp Glu Phe Gln Lys Tyr Gly His
 50           55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgcttc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgcgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggcccc
300
cncncncnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1           5           10           15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20           25           30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35           40           45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50           55           60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
65           70           75           80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85           90           95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545
ccatgggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt
60
caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
120
cgtctctgtc tcaagcacct cgcctgtttc caggttcaag gcctggatag tgcgagtgtc
180
gtactggtcg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat
240
ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc
300
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
360
ac
362

<210> 1546
<211> 92
<212> PRT
<213> Homo sapiens

<400> 1546
Met Val Lys Ser Cys Glu Leu Ala His Leu Thr Asp Arg Leu Cys Leu
1 5 10 15
Lys His Leu Ala Cys Phe Gln Val Gln Gly Leu Asp Ser Ala Ser Val
20 25 30
Val Leu Val Asp His Phe His Arg Val Val Trp Val Ala Pro Cys His
35 40 45
Ser Leu Tyr Asp Leu Asn His Arg Cys Ile Trp His Val Pro Glu Leu
50 55 60
Val Leu Leu Asn Asp Leu Ser Gly Val Val Glu Asn Leu His Ala Ile
65 70 75 80
Val Arg Met Gly His Cys Gly Asp Val Pro Ser Arg
85 90

<210> 1547
<211> 429
<212> DNA
<213> Homo sapiens

<400> 1547
cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt
60
ctgccgcggt cggtgtgggt cagcgccgtg tcggcgtgga acctggagcg cgagcgctg
120
cgcaaaactc gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
180
agcgtgggtg tgtggggggg gatgattgtc tggttgggcg cggcggtgat tccgttcctg
240
atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
300
gggcttaaac gccagaagt gcccaacggc cgttatgaac ggtgttcgcc tcggcactcg
360

tggaacagca accggattgt caccaatatc tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1548
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser
 1 5 10 15
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala
 20 25 30
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp
 35 40 45
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu
 50 55 60
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu
 65 70 75 80
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr
 85 90 95
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr
 100 105 110
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr
 115 120 125
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala
 130 135 140

<210> 1549
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1549
 gtcgacaggc tccaggggtc tggtttgtag tgcacccgct gtggtgcaac atgcgtctgg
 60
 gcacaccagc gtcgcccgtt tcctgttgta gtctttcctc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca acactccctc taggattttg gtctcccttt
 240
 tctctctggt ctttgaccac cgctacccag caaactcctc catctagacc agccagcatt
 300
 gggtttcttcc actccccag ctgccgcgtg ggaggcgcca ctgcaaactt ccctggggtc
 360
 tcccagctgc tcagagatcc ccatgccctt ccctgatcag ctccctgccc gggtctcatc
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1 5 10 15
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
 20 25 30
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
 35 40 45
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
 50 55 60
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
 65 70 75 80
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
 85 90 95
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
 100 105 110
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
 115 120 125
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
 130 135

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551
 ccacggatag cccacctctg gcactcaaca tgacttggt gccacacacc aggaacctc
 60
 agaggagcag ccagctggcc aagcaccctt gcccttgccc tgcgggctcc acaaaagctg
 120
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
 180
 ttggagatgg acaaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
 240
 gctccttctt ccatttggtc ctaacacagc ctcccagga gaccaggggc atcccnnnnc
 300
 cccnnc
 306

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1 5 10 15
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
 20 25 30
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

35 40 45
 Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
 50 55 60
 Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
 65 70 75 80
 Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
 85 90 95
 Ile Pro Xaa Pro Xaa
 100

<210> 1553
 <211> 657
 <212> DNA
 <213> Homo sapiens

<400> 1553
 atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcggggccac
 60
 acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
 120
 aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
 180
 tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cggggtctcc
 240
 aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccattgctg
 300
 attgcccgtt ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
 360
 cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
 420
 aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
 480
 aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
 540
 cgggacatgg tgtccaaggt ccagtgttat gaccctcgg agaacaggtg gacgatcaag
 600
 gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
 657

<210> 1554
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 1554
 Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
 1 5 10 15
 Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
 20 25 30
 Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
 35 40 45
 Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
 50 55 60
 Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
      85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
      100         105         110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
      115         120         125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
      130         135         140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145         150         155         160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
      165         170         175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
      180         185         190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
      195         200         205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
      210         215

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<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

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acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
60
ggaggagcct gccttgccgc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
 1          5          10          15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
      20          25          30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
      35          40          45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
      50          55          60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```


65 70 75 80
 Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
 85 90 95
 Leu Pro Ser Ser His Ala
 100

<210> 1557
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1557
 gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggatcgg ctccgctttc
 60
 tcgcattttt cggatcaggt caaattctgt gtcggcatt gacaggaaat tgacgtgtat
 120
 cagtcgattc ttgacagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
 180
 gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
 240
 ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc
 300
 gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg
 360
 cggagcgcgg cccgttcaaa tgcgacgcgt
 390

<210> 1558
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1558
 Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
 1 5 10 15
 Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
 20 25 30
 Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
 35 40 45
 Thr Trp Cys Gly Met Val Val Val Val Leu Leu Ser Ala Tyr Ser Ala
 50 55 60
 Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
 65 70 75 80
 Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
 85 90 95
 Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
 100 105 110
 Val His

<210> 1559
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 1559

accggtggcg acggtatcgg tggcgcgctcg atccttgccct cggaatcctt cgctgcagag
 60
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 gagtgcaccc ttgacctctt caacgcgggg gtagttgagg ccttgacagga ttccggtgcc
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 360
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 420
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac gggtgctcac
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<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

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Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20				25					30			
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40				45				
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55				60					
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90					95		
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100					105					110			
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
		115					120				125				
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135				140					
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150				155					160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
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Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180					185								

<210> 1561
<211> 466
<212> DNA
<213> Homo sapiens

<400> 1561
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120
ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
180
tgcggaatgg agaccattt tgcattgat tcatctgacc gataaggcca tagtgcagtt
240
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300
cgttgcttta aattcccaat gtgttggttc gttactacta atttaatacc gtaagctcta
360
ggtaaagtgc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc
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466

<210> 1562
<211> 130
<212> PRT
<213> Homo sapiens

<400> 1562
Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
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Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
20 25 30
Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
35 40 45
Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
50 55 60
Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
65 70 75 80
Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
85 90 95
Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
100 105 110
Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
115 120 125
Gly Met
130

<210> 1563
<211> 434
<212> DNA
<213> Homo sapiens

<400> 1563

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120
ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
180
gggtgtggtt tggatcatcct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
240
ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
300
gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
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tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggttga
420
ataagtgtac gcgt
434

<210> 1564
<211> 132
<212> PRT
<213> Homo sapiens

<400> 1564
Leu Gly Gly Val Phe Gly Leu Leu Ser Val Tyr Leu Pro Arg Trp Leu
1 5 10 15
His Glu Thr Pro Ile Phe Ala Glu Met Gln Gln Arg Lys Thr Leu Ala
20 25 30
Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile
35 40 45
Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val
50 55 60
Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser
65 70 75 80
Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser
85 90 95
Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly
100 105 110
Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg
115 120 125
Cys Ile Thr Ala
130

<210> 1565
<211> 373
<212> DNA
<213> Homo sapiens

<400> 1565
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agaggggtgag cggttctggc acctactgga ccatgaaagc aataaaggagg acaagggagc
120
ctgcattcgg ccatttcttc ccaagaatca ccataaagggt tgtcaaaatc aaggaccctg
180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt taccctccgag ggagaaaagc
 240
 ggggtgggtgct cttgatgctc gacaacctct accgtcccag taccacccgt gcattggcga
 300
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
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 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
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 180
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 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggt caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgccca cagcggggac ctcggagcta tgccttgata aggcaagtga gggtacatgt
600
acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
660
ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
720
tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat
780
gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg
840
ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
900
ggctgaagag ctgggtc
917

<210> 1568
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1568
Met Gly Pro Ala Leu Pro His Val Phe Glu Ser Gln His Leu Ser Pro
1 5 10 15
Leu Leu Cys Ile Cys Gly Ser Gln His Cys Leu Pro Pro Tyr Pro Asp
20 25 30
Ser Phe Arg Arg Leu Gly Gly Gln Pro Gly His Phe Cys Arg Asp Pro
35 40 45
Arg Leu Ser Arg Cys Pro Glu Ser Trp Gly Gly Leu Glu Gly Arg Gly
50 55 60
Pro Ala Ala Glu Ala Val Ser Arg Val Pro Ala Glu Gly Ala Ala Cys
65 70 75 80
Cys Ser Val Trp Ala Ser Pro Leu Pro Ser Gln Pro Gly Phe Arg Leu
85 90 95
Ile Leu Leu Glu Ala Ser Asn Trp Val Pro Gln Glu Cys Ser Gly Phe
100 105 110
Pro

<210> 1569
<211> 379
<212> DNA
<213> Homo sapiens

<400> 1569
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120
gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
180
attaaccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
240
atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
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 120
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat
 180
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcgggtgct ggtggcaggg
 240
 gtcgggatcg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca
 300
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg caccatgat cgccggc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

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Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65           70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573
 <211> 337
 <212> DNA
 <213> Homo sapiens

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<400> 1573
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120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggtt ataacacccg
180
ttggaaagag gatatccgtt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

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<210> 1574
 <211> 95
 <212> PRT
 <213> Homo sapiens

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<400> 1574
Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
      65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccatgtgg aggccgccct gtcccagggg cgtgacatcg tcgactatct gggagttggg
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 gctcaagacg tagcccgggt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
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 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577
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120
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287

<210> 1578
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1578
Leu Val Leu Gln Arg Pro Ile Ser Ala Leu Arg Met Leu Ile Gly Gly
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Pro Leu Arg Ile Pro His Pro Ala Gly Leu Arg Thr Val Ala Leu Glu
20 25 30
Pro Gly Val Ala His Ala Arg Thr Leu Arg Val Ala Gly Ala Gly Phe
35 40 45
Pro Ala Arg Gly Gln Arg Ala Ala Gly Asp Leu Val Ile Glu Leu Glu
50 55 60
Pro Met Leu Pro Gln Ala Pro Asp Lys Gln Leu His Ala Leu Ile Glu
65 70 75 80
Gln Leu Asp Val Ala Leu Gly Lys Ser Ala Thr Arg His Phe Pro
85 90 95

<210> 1579
<211> 2829
<212> DNA
<213> Homo sapiens

<400> 1579
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120
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420
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480

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540
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2100

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 2220
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 2700
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<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35				40					45				
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
		50				55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70					75					80
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85						90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
		115					120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
		130					135					140			
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155					160
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

				165					170					175	
Phe	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val
			180					185					190		
Asn	Asn	Asn	Phe	Thr	Phe	Glu	Phe	Ser	Gln	Trp	Ser	Gln	Leu	Asp	Val
		195						200					205		
Cys	Asp	Ile	Pro	Glu	Ser	Phe	Gln	Arg	Ser	Val	Asp	Gly	Val	Ser	Glu
	210					215					220				
Ser	Lys	Leu	Gln	Ile	Cys	Val	Glu	Pro	Thr	Ser	Gln	Lys	Leu	Met	Pro
225					230					235				240	
Gly	Ser	Thr	Leu	Val	Leu	Gln	Cys	Val	Ala	Val	Gly	Ser	Pro	Ile	Pro
			245						250					255	
His	Tyr	Gln	Trp	Phe	Lys	Asn	Glu	Leu	Pro	Leu	Thr	His	Glu	Thr	Lys
			260						265				270		
Lys	Leu	Tyr	Met	Val	Pro	Tyr	Ala	Asp	Leu	Glu	His	Gln	Gly	Thr	Tyr
		275						280					285		
Trp	Cys	His	Val	Tyr	Asn	Asp	Arg	Asp	Ser	Gln	Asp	Ser	Lys	Lys	Val
	290					295					300				
Glu	Ile	Ile	Ile	Gly	Arg	Thr	Asp	Glu	Ala	Val	Glu	Cys	Thr	Glu	Asp
305					310					315				320	
Glu	Leu	Asn	Asn	Leu	Gly	His	Pro	Asp	Asn	Lys	Glu	Gln	Thr	Thr	Asp
			325						330					335	
Gln	Pro	Leu	Ala	Lys	Asp	Lys	Val	Ala	Leu	Leu	Ile	Gly	Asn	Met	Asn
		340						345					350		
Tyr	Arg	Glu	His	Pro	Lys	Leu	Lys	Ala	Pro	Leu	Val	Asp	Val	Tyr	Glu
	355						360					365			
Leu	Thr	Asn	Leu	Leu	Arg	Gln	Leu	Asp	Phe	Lys	Val	Val	Ser	Leu	Leu
	370					375					380				
Asp	Leu	Thr	Glu	Tyr	Glu	Met	Arg	Asn	Ala	Val	Asp	Glu	Phe	Leu	Leu
385					390					395				400	
Leu	Leu	Asp	Lys	Gly	Val	Tyr	Gly	Leu	Leu	Tyr	Tyr	Ala	Gly	His	Gly
			405						410					415	
Tyr	Glu	Asn	Phe	Gly	Asn	Ser	Phe	Met	Val	Pro	Val	Asp	Ala	Pro	Asn
		420						425					430		
Pro	Tyr	Arg	Ser	Glu	Asn	Cys	Leu	Cys	Val	Gln	Asn	Ile	Leu	Lys	Leu
	435						440					445			
Met	Gln	Glu	Lys	Glu	Thr	Gly	Leu	Asn	Val	Phe	Leu	Leu	Asp	Met	Cys
	450					455					460				
Arg	Lys	Arg	Asn	Asp	Tyr	Asp	Asp	Thr	Ile	Pro	Ile	Leu	Asp	Ala	Leu
465				470						475				480	
Lys	Val	Thr	Ala	Asn	Ile	Val	Phe	Gly	Tyr	Ala	Thr	Cys	Gln	Gly	Ala
			485						490					495	
Glu	Ala	Phe	Glu	Ile	Gln	His	Ser	Gly	Leu	Ala	Asn	Gly	Ile	Phe	Met
		500						505					510		
Lys	Phe	Leu	Lys	Asp	Arg	Leu	Leu	Glu	Asp	Lys	Lys	Ile	Thr	Val	Leu
	515						520					525			
Leu	Asp	Glu	Val	Ala	Glu	Asp	Met	Gly	Lys	Cys	His	Leu	Thr	Lys	Gly
	530					535					540				
Lys	Gln	Ala	Leu	Glu	Ile	Arg	Ser	Ser	Leu	Ser	Glu	Lys	Arg	Ala	Leu
545					550					555				560	
Thr	Asp	Pro	Ile	Gln	Gly	Thr	Glu	Tyr	Ser	Ala	Glu	Ser	Leu	Val	Arg
			565						570					575	
Asn	Leu	Gln	Trp	Ala	Lys	Ala	His	Glu	Leu	Pro	Glu	Ser	Met	Cys	Leu
		580						585					590		
Lys	Phe	Asp	Cys	Gly	Val	Gln	Ile	Gln	Leu	Gly	Phe	Ala	Ala	Glu	Phe

595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
 820

<210> 1581
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1581
 gatccgcac gcccgtttat tgacgaggtg accttcaccc gagagggcca tacctatcac
 60
 cgggtgcccc aggtggctga cgcctggctc gattcgggct cgatgccctt cgcccagtgg
 120
 ggatacccg atgtgcccgg ttcgaaggag aagttcgagt cccactaccc gggtgacttc
 180
 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gctcatggat
 360
 tcccacggtg ccgacgcgct gcgttggttc atggcgcccg acggctcccc atggagtgca
 420
 cgacgc
 426

<210> 1582

<211> 142
<212> PRT
<213> Homo sapiens

<400> 1582
Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
1 5 10 15
His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
20 25 30
Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
35 40 45
Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
50 55 60
Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
65 70 75 80
Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
85 90 95
Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
100 105 110
Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
115 120 125
Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
130 135 140

<210> 1583
<211> 450
<212> DNA
<213> Homo sapiens

<400> 1583
nnacgcgtga agggttatgg agatggttca gggagtaagg aaggtttcag ggatggttta
60
ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
120
cctaaggga taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg
180
gaaatggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
240
ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
300
ggggatgagg caggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
360
gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgatcatg gaatgaggca
420
ggttctaggc aaggctttgg gggaactagt
450

<210> 1584
<211> 150
<212> PRT
<213> Homo sapiens

<400> 1584
Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

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      1           5           10           15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala
      20           25           30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser
      35           40           45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser
      50           55           60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met
      65           70           75           80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly
      85           90           95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly
      100          105          110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu
      115          120          125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln
      130          135          140
Gly Phe Gly Gly Thr Ser
      145          150

```

<210> 1585
 <211> 596
 <212> DNA
 <213> Homo sapiens

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<400> 1585
tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
60
tctaataccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
120
ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg
180
gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg
240
tttagaaata cgcttttttaa ggaacgacag agaaataaag attcaccata caacttcagt
300
aaccctccta taacggttttt agaagatatc agaattgatc cacagcccac ctcttttagaa
360
cattacaaat ctgatgcac attcagtaaa aggtcttcta gaacgagatt tactgactac
420
cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
480
gaacaactct ccactgttct caatctgect acccgggtta ttgttgatg gttccagaat
540
gctcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
596

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<210> 1586
 <211> 139
 <212> PRT
 <213> Homo sapiens

```

<400> 1586
Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```



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      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130          135

```

<210> 1587
 <211> 501
 <212> DNA
 <213> Homo sapiens

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<400> 1587
tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tggtcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcggtgctc tgacagctca gacccagac cgcaggtgct cccgacagct cagacccag
300
accgcggtg ctctgacag ctacagaccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcggtgctc cgacagctca
420
gacccagac cgcgggtgct cctgacagct cagacccag accgcggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

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<210> 1588
 <211> 86
 <212> PRT
 <213> Homo sapiens

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<400> 1588
Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
      1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35      40      45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
      50      55      60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65      70      75      80
Pro Asp Arg Gly Cys Ser
      85

```

<210> 1589
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 1589
 aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
 60
 tccaccgggt ccactaacgc cgacatgggt gctttcgtgc gagcaggggg aacgtctttc
 120
 tgcctactcg ttgctgacca ccaagagggc gggcgtggac ggttcacgcg cagttggcag
 180
 gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag
 240
 gactggggct ggctgtcgat ggttgccggg ctcgctgttg tcaaggtcat caaggaggtc
 300
 ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
 360
 gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
 407

<210> 1590
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 1590
 Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
 1 5 10 15
 Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
 20 25 30
 Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
 35 40 45
 Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
 50 55 60
 Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
 65 70 75 80
 Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
 85 90 95
 Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
 100 105 110
 Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
 115 120 125
 Cys Gly Ile Leu Ser Glu Arg
 130 135

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
 agatctctct ccctgagata acccaggctt tagaaccaaa gagctgagag accctgtccc
 60
 ttcagagagg cacttgacc tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcattctga aaaagcccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgtcgt ccctgcacag
 240
 aacgtccagc gagtcctgac tttccagccg ctgcgcttca tccaggagca cgtcctgate
 300
 cctgtctttg acctcagcgg ccccagcagt ctggcccagc ctgtccagta ctcccttgac
 360
 tgtgggatcc ctggctgctc acgcccctga ggacccctcg gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
 1 5 10 15
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaatg agccattga aggcaaacctc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt
240
ttaaaggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggtg tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaa gaaatcccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaag tcatgggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaag ccaaacttcc attggtcagg taattcagga ggggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt ttgaaaactg atttgtttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagtttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaaact aagtttacta tctgtaaag taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaaata aacttggtag gtatttcata tctattttaa aaatgaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

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Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1          5          10          15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20          25          30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35          40          45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50          55          60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65          70          75          80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85          90          95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
355          360          365

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<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595
 accggtccc ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctggtggg
 60
 gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtggg accttccccg gggcgggtca
 180
 tcccttgag atgtagggtg cagctgagat ggtggcgcc ccattcctgc tgttcgccag
 240
 cctgggctgg gggtagtagg atcacccttg ggctgatgag gagcccggt cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgag agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag
 540
 gccactgga ggaacgcgt
 559

<210> 1596
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1596
 Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu
 1 5 10 15
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu
 20 25 30
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp
 35 40 45
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro
 50 55 60
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile
 65 70 75 80
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His
 85 90 95
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu
 100 105 110
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys
 115 120 125
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro
 130 135 140
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp
 145 150 155 160
 Ala Cys Glu Arg Asp Arg
 165

<210> 1597
 <211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta
60
ccgggtggtt ccgggtggtg ttcagcagct agcttggtt cctttcaggc cccgttggct
120
ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
180
atcaagccga cctacgggtc gacctcccga tacggcggtta tcgctatggc ttcattcttg
240
gatactcctg ggccctgcgc ccgtaccgtc cttgacgccg cggtgctcca tcaggccatt
300
gccggtcacg acgctatgga ccagaccacg attaatacgc ccaccccggc ggtcgttgag
360
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
420
cagggttacg accctcaggt cgaggcccgg ttccacgagg ctgtcgagat gctaatagag
480
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctgcctt acctgcttat
540
taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
600
ggcttacgc
609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35				40					45				
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50				55				60						
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65				70				75						80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
			85					90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
		100						105					110		
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120				125				
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130				135				140						
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145				150				155					160		
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
60
atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
120
ttcttcccgg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
180
ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
240
gccaccgtcg gaattctgct tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag
300
aacgtcgaag aggccgtcgg cgacatcaaa gccaaactgg cacgggtcga ggaagtctcc
360
gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat gggtagctg
420
cagaccgagc tcgataacgc caacgcg
447

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

Met	Ala	Glu	Phe	Ile	Tyr	Thr	Met	His	Asn	Val	Arg	Lys	Ala	Val	Gly
1				5					10					15	
Asp	Lys	Val	Ile	Leu	Asp	Asn	Val	Thr	Leu	Ser	Phe	Phe	Pro	Gly	Ala
			20					25					30		
Lys	Ile	Gly	Val	Val	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Ser	Thr	Met	Leu
		35					40					45			
Lys	Leu	Met	Ala	Gly	Leu	Asp	Lys	Pro	Asn	Asn	Gly	Asp	Ala	Asn	Leu
	50					55					60				
Ala	Lys	Gly	Ala	Thr	Val	Gly	Ile	Leu	Leu	Gln	Glu	Pro	Pro	Leu	Thr
65					70					75				80	
Glu	Asp	Lys	Thr	Val	Arg	Glu	Asn	Val	Glu	Glu	Ala	Val	Gly	Asp	Ile
				85					90					95	
Lys	Ala	Lys	Leu	Ala	Arg	Phe	Glu	Glu	Val	Ser	Ala	Glu	Met	Ala	Asn
		100					105						110		
Pro	Asp	Ala	Asp	Phe	Asp	Ala	Leu	Met	Ala	Glu	Met	Gly	Glu	Leu	Gln
		115					120					125			
Thr	Glu	Leu	Asp	Asn	Ala	Asn	Ala								
		130					135								

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603
acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
60
gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg
120
cacgggtttg gcttggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
180
catcaagtcg cggtgttggt cgggatggtc aagggcccggt cctattacaa cccgcggcgc
240
aatccggaac gtgcgctcga gcgtcgtaac ctgggtgctgg atgtgctgga acagcagggg
300
gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
360
ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacy ccagttgcgt
420
gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
480
ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
540

<210> 1604
<211> 180
<212> PRT
<213> Homo sapiens

<400> 1604
Thr Arg Lys Leu Thr Glu Ala Met Met Ala Met Leu Leu Glu Leu His
1 5 10 15
Tyr Ser Lys Gln Glu Ile Leu Glu Ala Tyr Leu Asn Glu Val Phe Val
20 25 30
Gly Gln Asp Gly Gln Arg Ala Val His Gly Phe Gly Leu Ala Ser Gln
35 40 45
Phe Phe Phe Gly Gln Pro Leu Ser Glu Leu Lys Leu His Gln Val Ala
50 55 60
Leu Leu Val Gly Met Val Lys Gly Pro Ser Tyr Tyr Asn Pro Arg Arg
65 70 75 80
Asn Pro Glu Arg Ala Leu Glu Arg Arg Asn Leu Val Leu Asp Val Leu
85 90 95
Glu Gln Gln Gly Val Ala Thr Ala Glu Gln Val Ala Ala Ala Lys Lys
100 105 110
Met Pro Leu Gly Val Thr Thr Arg Gly Lys Leu Ala Asp Ser Ser Phe
115 120 125
Pro Gly Phe Ile Asp Leu Val Lys Arg Gln Leu Arg Glu Asp Tyr Arg
130 135 140
Asp Glu Asp Leu Thr Glu Glu Gly Leu Arg Ile Phe Thr Ser Phe Asp
145 150 155 160
Pro Ile Leu Gln Met Lys Ala Glu Ala Ser Val Asn Asp Thr Phe Lys
165 170 175
Arg Leu Thr Gly
180

<210> 1605
<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

acgcgttggt gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
 60
 cattctttgc gggcgggata tgcactggga tattgcggcc catcgctgt gaccacacat
 120
 cgcagcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
 180
 gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
 240
 ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
 300
 tctttctcct tcacaaagta tttggtaatt gtcacttagc tttatcgctc ggaatctgtg
 360
 aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatgcac tcccggggcca
 420
 aatgttg
 427

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

Met	Thr	Ala	Ser	Ile	Arg	Gly	Arg	Val	Leu	Ser	Val	Ile	Met	Ala	Val
1				5				10					15		
Ala	Val	Ala	Leu	Gly	Leu	Ala	Val	Val	Ala	Gly	Gly	Thr	Gln	Gln	Ala
		20					25					30			
His	Ala	Ala	His	Arg	Asp	Phe	Leu	Arg	Ala	Asp	Ser	Thr	Gly	Thr	Cys
		35				40					45				
Glu	Trp	Asp	Gln	Val	Gly	Trp	Trp	Val	Gln	Arg	Cys	Asp	Val	Trp	Ser
	50					55					60				
Gln	Ala	Met	Gly	Arg	Asn	Ile	Pro	Val	Gln	Ile	Pro	Pro	Ala	Lys	Asn
65					70				75				80		
Gly	Gly	Asn	Ala	Gly	Leu	Tyr	Leu	Leu	Asp	Gly	Leu	Arg	Ala	Thr	Asp
			85					90					95		
Arg	Thr	Asn	Ala												
			100												

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
 60
 tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtcaa
 120
 cggatgggac tgatcccgtg cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
 180

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,
240
tttctgttg caccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
300
atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
360
gacggaggcg aaggcacggg gcagtcgctg gtcgac
396

<210> 1608
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1608
Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met
1 5 10 15
Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
20 25 30
Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu
35 40 45
Gly Thr Val Gln Ser Leu Val Asp
50 55

<210> 1609
<211> 505
<212> DNA
<213> Homo sapiens

<400> 1609
acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
60
ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
120
gcggcccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg
180
ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg
240
gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt
300
gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat
360
ggggtgaatt ggacgggtccc ccctggccag cgagtcggtg gacgattcga ctggggacat
420
gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat
480
ggagcgagaa aaagcgggcg tcgac
505

<210> 1610
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1610

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1 5 10 15
 Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
 20 25 30
 Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
 35 40 45
 Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
 50 55 60
 Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
 65 70 75 80
 Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
 85 90 95
 Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
 100 105 110
 Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
 115 120 125
 Met

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

acgcgtgctg cggtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
 60
 aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtatttaggt
 120
 agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
 180
 aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
 240
 ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
 300
 tacgttgagg atggacgtaa taatattgag cattcattaa tggtagcagg tgctatgtta
 360
 ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
 420
 attgcaaaag aaaaagcgag tcaatatggt ggttcagtca tgattacgga taatattgca
 480
 gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
 532

<210> 1612

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1612

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1 5 10 15
 Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

	20		25		30										
Glu	Asp	Thr	Ala	Lys	Val	Leu	Gly	Arg	Met	Phe	Asp	Gly	Ile	Glu	Phe
	35		40		45										
Arg	Gly	Phe	Ser	Gln	Gln	Ala	Gly	Glu	Asp	Leu	Ala	Lys	Phe	Ser	Gly
	50		55		60										
Val	Pro	Gly	Trp	Asn	Gly	Leu	Thr	Asp	Asp	Trp	His	Pro	Thr	Gln	Met
65			70		75									80	
Leu	Ala	Asp	Phe	Met	Thr	Ile	Lys	Glu	Asn	Phe	Gly	Tyr	Leu	Glu	Gly
			85		90									95	
Ile	Asn	Leu	Thr	Tyr	Val	Gly	Asp	Gly	Arg	Asn	Asn	Ile	Ala	His	Ser
			100		105									110	
Leu	Met	Val	Ala	Gly	Ala	Met	Leu	Gly	Val	Asn	Val	Arg	Ile	Cys	Thr
			115		120									125	
Pro	Lys	Ser	Leu	Asn	Pro	Lys	Glu	Ala	Tyr	Val	Asp	Ile	Ala	Lys	Glu
			130		135									140	
Lys	Ala	Ser	Gln	Tyr	Gly	Gly	Ser	Val	Met	Ile	Thr	Asp	Asn	Ile	Ala
145			150		155									160	
Glu	Ala	Val	Glu	Asn	Thr	Asp	Ala	Ile	Tyr	Thr	Asp	Val	Trp	Val	Ser
			165		170									175	

Thr

<210> 1613
 <211> 584
 <212> DNA
 <213> Homo sapiens

<400> 1613
 nnacgcgttc agccgagaaa tatgctgctt tttgcctgcc acctcacaaa tgctacggca
 60
 cagggcgctcc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
 120
 gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
 180
 tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
 240
 tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataagtgcg tatgcctggc
 300
 acggtaaagt gtcgcgggct tgtagatgcg tgtgaacggt ttcgtgactt gaagaggctg
 360
 aagctgatgt gttcgcgtga gctcgatgca gcgcgctgcg ttgcgtgcct tgtggtcgat
 420
 cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
 480
 gtgggcgagg cgatgagttc ctcatctgcg tctttctcga ggtcttggtc catgtccata
 540
 aacataccaa agctggatgg gtcatacgac ggccgagcat gcat
 584

<210> 1614
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcggtgcttg tcagtgtcgg tgtcatcatt tccctgcttg gggctctact ggcctggatc
 120
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
 180
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
 240
 cagatatgcc ttgtcatgac ggtgttgtgg gacgggtgctt acttggcgat ggcgaccctg
 300
 gctgccgccc tcacctcgtt gccgtacctg ctgtcagccg cattcgccct gaagatggtg
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

      35      40      45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
      50      55      60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
      65      70      75      80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85      90      95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100      105      110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115      120

```

<210> 1617
 <211> 447
 <212> DNA
 <213> Homo sapiens

```

<400> 1617
accggtgact acctgtggga gaagaagggc atcggtccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcca cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaaccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcattccgc agcacatcga ctctctgccg
360
ctcgacgcca agatcatgtt gaagctgacg atcccagatt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggt cctacgc
447

```

<210> 1618
 <211> 149
 <212> PRT
 <213> Homo sapiens

```

<400> 1618
Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1      5      10      15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
20      25      30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
35      40      45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
50      55      60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
65      70      75      80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
85      90      95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```


100 105 110
 Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
 115 120 125
 Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
 130 135 140
 Pro Lys Val Leu Arg
 145

<210> 1619
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1619
 nnggtaccga aaccgtgtc gctaccgcat aaaatcaaag gaactagtat gcataacgta
 60
 acaacaaatg gtgctccat tcccgcctt ggccttgga ctttccgtat gcccggcgaa
 120
 gatgtgcttc gcacgtccc ttacgcgtc aaggctggtt ttcccatgt cgataccgag
 180
 cagatttatg gcaatgaagt cgaggctggt gaagcaattg cgacttccgg cgttcagcgt
 240
 ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcacc
 300
 gcattctgtc atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
 355

<210> 1620
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1620
 Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
 1 5 10 15
 Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
 20 25 30
 Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
 35 40 45
 Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
 50 55 60
 Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
 65 70 75 80
 Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
 85 90 95
 Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
 100 105 110
 Asp Tyr Val Asp Leu Leu
 115

<210> 1621
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1621
 gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaagtg aagcgggtccg
 60
 gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg
 120
 ccccgaggc ggcggtaggc agcgcgctgg cccagggagc cacgggtcaag gcagaaggcg
 180
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcgggc acaaagcccc
 240
 acctgcccac ctacctgtg ctcttcttcc tgctgctgct ctcgggggcg ctcggcggcc
 300
 tcttcacggt ttgccagctg cgccattcgg ccttcgcgcg gctgccccac gaccgcttcg
 360
 ctgcgcacgc ccgcgcgccc ggaagg
 386

<210> 1622
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1622
 Met Glu Ala Pro Arg Val Ala Pro Gly Cys Ser Arg Pro Ser Glu Ala
 1 5 10 15
 Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
 20 25 30
 Gln Arg His Gly Ala Gly Pro Arg Gly Gly Gly Arg Gln Arg Ala Gly
 35 40 45
 Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
 50 55 60
 His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
 65 70 75 80
 His Leu Pro Ala Ala Leu Leu Pro Ala Ala Ala Leu Gly Gly Ala Arg
 85 90 95
 Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
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 Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
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<210> 1623
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1623
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 120
 aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgac tgtgccttgt
 180
 gcttggcacc caagcagggc atgggagtct taagtggaac cagggcctca aggacaacag
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 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly
 1 5 10 15
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro
 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
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 180
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 360
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 420
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 480
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 619

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg
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 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
 100 105

<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 360
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 480
 t
 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
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      1           5           10           15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg
      20           25           30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly
      35           40           45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly
      50           55           60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu
      65           70           75           80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr
      85           90           95
Ser Pro Ala His Val Val His Ala
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<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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1020

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 4500
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 4519

<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

Pro	Asn	Cys	Trp	Glu	Cys	Pro	Lys	Cys	Tyr	Gln	Glu	Asp	Ser	Ser	Glu
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			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55				60					
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65				70					75					80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
			85					90						95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
		100					105					110			
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
	115					120						125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145				150					155					160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
			165					170						175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
		180					185					190			
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
	195					200					205				
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225				230					235					240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245					250						255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
		260					265					270			
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
	275					280						285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290	295	300
Trp Leu Val Asn Arg	Leu Pro Gly Leu Lys Asp	Leu Leu Leu Ala Gly
305	310	315
Cys Ser Trp Ser Ala	Val Ser Ala Leu Ser Thr Ser	Ser Cys Pro Leu
325	330	335
Leu Arg Thr Leu Asp	Leu Arg Trp Ala Val Gly Ile Lys	Asp Pro Gln
340	345	350
Ile Arg Asp Leu Leu	Thr Pro Pro Ala Asp Lys Pro Gly	Gln Asp Asn
355	360	365
Arg Ser Lys Leu Arg	Asn Met Thr Asp Phe Arg Leu Ala	Gly Leu Asp
370	375	380
Ile Thr Asp Ala Thr	Leu Arg Leu Ile Ile Arg His Met	Pro Leu Leu
385	390	395
Ser Arg Leu Asp Leu	Ser His Cys Ser His Leu Thr Asp	Gln Ser Ser
405	410	415
Asn Leu Leu Thr Ala	Val Gly Ser Ser Thr Arg Tyr Ser	Leu Thr Glu
420	425	430
Leu Asn Met Ala Gly	Cys Asn Lys Leu Thr Asp Gln Thr	Leu Ile Tyr
435	440	445
Leu Arg Arg Ile Ala	Asn Val Thr Leu Ile Asp Leu Arg	Gly Cys Lys
450	455	460
Gln Ile Thr Arg Lys	Ala Cys Glu His Phe Ile Ser Asp	Leu Ser Ile
465	470	475
Asn Ser Leu Tyr Cys	Leu Ser Asp Glu Lys Leu Ile Gln	Lys Ile Ser
485	490	495

<210> 1631
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1631
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 ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac
 180
 caaccaagtt cagcaagctg tgggcgcctt gggtttaccg ccactagaag atgaaaacgc
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 330

<210> 1632
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1632
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 Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

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Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
      35      40      45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
      50      55      60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
      65      70      75      80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
      85      90

```

<210> 1633
 <211> 259
 <212> DNA
 <213> Homo sapiens

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<400> 1633
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120
ggattgtag gtggatttac gacttattcc gccctcaccg tggaaaccgg ccaacgtgtg
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atgtcagggc agtggttatg gggattgcc tatcttttga cgagtgtcgt ggcaggtgca
240
ttgttgcat gggatcatga
259

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<210> 1634
 <211> 86
 <212> PRT
 <213> Homo sapiens

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<400> 1634
Xaa Gly Thr Leu Ala Ile Asn Leu Val Gly Ala Phe Val Leu Ala Thr
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Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
20      25      30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
35      40      45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
50      55      60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65      70      75      80
Leu Leu Ala Trp Val Met
85

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<210> 1635
 <211> 792
 <212> DNA
 <213> Homo sapiens

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<400> 1635
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60

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120
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792

<210> 1636
<211> 243
<212> PRT
<213> Homo sapiens

<400> 1636
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Glu Ala Val Arg Arg Glu Leu Arg Glu Phe Leu Asp Lys Cys Ala Gly
20 25 30
Ser Lys Ala Ile Val Trp Asp Glu Tyr Leu Thr Gly Pro Phe Gly Leu
35 40 45
Ile Ala Gln Tyr Ser Leu Leu Lys Glu His Glu Val Glu Lys Met Phe
50 55 60
Thr Leu Lys Gly Asn Arg Leu Pro Ala Ala Asp Val Lys Asn Ile Ile
65 70 75 80
Phe Phe Val Arg Pro Arg Leu Glu Leu Met Asp Ile Ile Ala Glu Asn
85 90 95
Val Leu Ser Glu Asp Arg Arg Gly Pro Thr Arg Asp Phe His Ile Leu
100 105 110
Phe Val Pro Arg Arg Ser Leu Leu Cys Glu Gln Arg Leu Lys Asp Leu
115 120 125
Gly Val Leu Gly Ser Phe Ile His Arg Glu Glu Tyr Ser Leu Asp Leu
130 135 140
Ile Pro Phe Asp Gly Asp Leu Leu Ser Met Glu Ser Glu Gly Ala Phe
145 150 155 160
Lys Glu Cys Tyr Leu Glu Gly Asp Gln Thr Ser Leu Tyr His Ala Ala

[illegible]

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<210> 1637
<211> 357
<212> DNA
<213> Homo sapiens
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240
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<210> 1638
<211> 119
<212> PRT
<213> Homo sapiens
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<400> 1638
Xaa Met Met Thr Gln Thr Pro Ala His Pro Gly Leu Ile Ser Leu Gln
 1              5              10              15
Gly Ile Gly Lys Arg Tyr Gln Leu Ala Gly Gln Lys Leu Ser Ile Leu
      20              25              30
Asn Asp Val Cys Leu Ser Ile Ser Arg Gly Asp Ser Cys Gly Ile Leu
      35              40              45
Gly Ala Ser Gly Ser Gly Lys Ser Thr Leu Leu Asn Ile Leu Gly Leu
      50              55              60
Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
65              70              75              80
Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
      85              90              95
Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
      100              105              110
Asp Asn Val Ala Leu Pro Leu
      115

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<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
 acgcgtgtac gtgcgcgtgt gatttcacat gccctcaaag atattcttac tgaaggcgat
 60
 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga
 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgtaa catcggtatga ggcttgggat atgatgactt ctaagacgac tgcgttggt
 300
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctctccacc
 180
 ttcatgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1642
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly
 1 5 10 15
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro
 20 25 30
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly
 35 40 45
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr
 50 55 60
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro
 65 70 75 80
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val
 85 90 95
 Ile Trp Lys Lys
 100

<210> 1643
 <211> 494
 <212> DNA
 <213> Homo sapiens

<400> 1643
 aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
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 gagtgtctga gacgaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
 180
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtgc cgatggcacc ctatatcacc taagcggggc
 360
 tgtgcctcct gaggttttag ggacaccaga atgagcccc ctcggcggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa cccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggctcc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaattgc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtgcgggttg aagcaggggtg ccagcatcct gatccgggct
 240
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

```

      20      25      30
Asn Phe Asn Val Arg Cys Lys Glu Thr Leu Asp Asp Val Leu His Arg
      35      40      45
Ile Ala Gln Leu Met Gln Asp Asp Asp Cys Pro Leu Gln Ser Leu Ser
      50      55      60
Val Ala Glu Ser Arg Leu Lys Gln Gly Ala Ser Ile Leu Ile Arg Ala
      65      70      75      80
Leu Gly Thr Asn Pro Lys Leu Thr Ala Leu Asp Ile Ser Gly Asn Ala
      85      90      95
Ile Gly Asp Ala Gly Ala Lys Met Leu Ala Lys Ala Leu Arg
      100      105      110

```

<210> 1647
 <211> 501
 <212> DNA
 <213> Homo sapiens

```

<400> 1647
aggccgctcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctcgggctcc accgaccctc ctcccacccc ctcccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tccccatcgg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccg ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

```

<210> 1648
 <211> 84
 <212> PRT
 <213> Homo sapiens

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<400> 1648
Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
1      5      10      15
Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
      20      25      30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
      35      40      45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
      50      55      60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
      65      70      75      80
Pro Val Thr Pro

```


<210> 1649
<211> 441
<212> DNA
<213> Homo sapiens

<400> 1649
gcgtcggcag ctgaacgggt gctactggca atcggcgaac ccgaactgct ggatacgtcc
60
accaactcac ggttgctcgc catcttctcc aacaagggtga tccggcgcta tccggccttt
120
gaagacttcc acgggatgga agaatgcac gatcagatcg tttcgtatatt ccgccacgcc
180
gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
240
aaatcgctcc tggccgaaaa gctgaaacag ctgatcgaga aggtccccctt ctacgccatc
300
aagggtcgc cggtcttcga gtcgccccctg gggttgttca acgccactga agacggcgcg
360
atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccctgg
420
gcgaccaagc gcctggccga a
441

<210> 1650
<211> 147
<212> PRT
<213> Homo sapiens

<400> 1650
Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
1 5 10 15
Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
20 25 30
Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
35 40 45
Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
50 55 60
Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
65 70 75 80
Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
85 90 95
Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
100 105 110
Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
115 120 125
Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
130 135 140
Leu Ala Glu
145

<210> 1651
<211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

nccgcggatc cctccggcat cctgggtatc gctccctcga aggaatccgg agcccgactg
60
cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

Xaa	Ala	Asp	Pro	Ser	Gly	Ile	Leu	Val	Ile	Ala	Pro	Ser	Lys	Glu	Ser
1				5					10					15	
Gly	Ala	Arg	Leu	Arg	Arg	Glu	Leu	Ser	Glu	Arg	Leu	Glu	Asp	Tyr	Ala
			20					25					30		
Ala	Gln	Thr	Ser	Met	Val	Arg	Ser	Val	His	Ser	Leu	Ala	Phe	Ala	Leu
		35					40				45				
Leu	Arg	Thr	Ala	Ala	Glu	Glu	Glu	Leu	Arg	Leu	Ile	Thr	Gly	Ala	Asp
	50					55					60				
Xaa	Asp	Ala	Val	Ile	Arg	Glu	Leu	Leu	Thr	Gly	Gln	Ala	Glu	Asp	Gly
65					70					75				80	
His	Gly	Ser	Trp	Pro	Ala	Glu	Met	Arg	Pro	Ala	Trp	Asn	Xaa	Cys	Gly
			85					90					95		
Leu	Ser	Arg	Gln	Leu	Arg	Asp	Phe	Leu	Leu	Arg	Ser	Ile	Glu	Arg	Gly
		100						105				110			
Leu	Gly	Pro	Gly	Asp	Leu	Glu	Ser	Leu	Gly	Ala	Glu	His	Gly	Arg	Pro
	115					120					125				
Met	Trp	Ser	Ala	Ala	Gly	Glu	Phe								
	130					135									

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

ccagcctctc tccgaccgcg tcctttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

ctgcgacccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccgggtgct gcacaggtgg cacaaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1654
 Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn
 1 5 10 15
 Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu
 20 25 30
 Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp
 35 40 45
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val
 50 55 60
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp
 65 70 75 80
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala
 85 90 95
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln
 100 105 110
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu
 115 120 125
 Arg Leu Cys Leu
 130

<210> 1655
 <211> 1115
 <212> DNA
 <213> Homo sapiens

<400> 1655
 nccctgacct gacctgtcct cgccatggcc gagggccgct ccggcgccgg gggcacgtcc
 60
 ctggagggcg agcgtggcaa gagggccccg ccggagggcg agcctgcagc cccggcgctcc
 120
 ggagttcttg ataagctttt cggaaagcgg ctctctgcagg ctggctgcta cctgggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc
 300
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgagggggc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggttc tcctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgcaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtgtt ccctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgcttggtg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatgtt tcctgcgtgg tctttgccct cttcaacgtg
 900
 atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cagccccca gttcaggtgc
 1020
 gtgcgacgta tcatcccat cactcggggc gaggagttct actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1			5					10					15		
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
			35				40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
			50			55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75					80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
			85					90					95		
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100				105					110			
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
			115				120				125				
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
			130			135				140					
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150				155					160		
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

165															170					175									
Arg	Ala	Lys	Gln	Gly	Glu	Ala	Leu	His	Asn	Val	Arg	Phe	Leu	Glu	Asp														
180															185					190									
Gln	Pro	Ile	Ile	Pro	Glu	Leu	Ala	Ala	Arg	Gly	Ile	Ile	Gln	Gln	Val														
195															200					205									
Phe	Pro	Val	His	Glu	Gln	Arg	Ile	Leu	Asn	Arg	Leu	Met	Lys	Ser	Trp														
210															215					220									
Val	Gln	Ala	Val	Cys	Glu	Asn	Gln	Pro	Leu	Asp	Asp	Ile	Cys	Asp	Tyr														
225															230					235					240				
Phe	Gly	Val	Lys	Ile	Ala	Met	Tyr	Phe	Ala	Trp	Leu	Gly	Phe	Tyr	Thr														
245															250					255									
Ser	Ala	Met	Val	Tyr	Pro	Ala	Val	Phe	Gly	Ser	Val	Leu	Tyr	Thr	Phe														
260															265					270									
Thr	Glu	Ala	Asp	Gln	Thr	Ser	Arg	Asp	Val	Ser	Cys	Val	Val	Phe	Ala														
275															280					285									
Leu	Phe	Asn	Val	Ile	Trp	Ser	Thr	Leu	Phe	Leu																			
290															295														

```
<210> 1657
<211> 333
<212> DNA
<213> Homo sapiens
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<400> 1657
tgtagaggct cgaggtcac cggaccatgt ggtccaggac gcccccgctc tccggggcccc
60
gcacggagac gcggcgtcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccc cgggcttccc gcgccgcttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat cgcgccctgc tagcatcagg gct
333
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<210> 1658
<211> 108
<212> PRT
<213> Homo sapiens
```

```

<400> 1658
Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
  1                      5                      10                      15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
          20                      25                      30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
          35                      40                      45
Glu Val Pro Ala Arg Ala Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
          50                      55                      60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65                      70                      75                      80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```

85 90 95
Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
100 105

<210> 1659
<211> 382
<212> DNA
<213> Homo sapiens

<400> 1659
nnaagcttat ttgttattac taatattttc cgtgaccaga tgggccgcta tggtagagatt
60
tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
120
cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
180
ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
240
tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc
300
tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
360
gttgagttaa ccaacaatcg cn
382

<210> 1660
<211> 127
<212> PRT
<213> Homo sapiens

<400> 1660
Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
1 5 10 15
Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
20 25 30
Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
35 40 45
Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
50 55 60
Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
65 70 75 80
Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
85 90 95
Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
100 105 110
Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
115 120 125

<210> 1661
<211> 524
<212> DNA
<213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgata
60
gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccgggtcc
120
gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc
180
tgagcacctg ctctcatca tcagggttca ggaccttga ctgccgcagg taagggtgtga
240
tgcgtagagg gtcgatgacc gaggtgagcg tcacccggaa gccctccagg acgttccagc
300
actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtggtggggc
360
agtgtgaga gcgatgccgg ctctgcccc caccggggcc cagctccac tccttctcag
420
acgctggggc agggctctcg tcagggcac gagggggatc agcccaggcg catccaggag
480
aggtgcccag ctccgtgtcc catcccacgc ttgatcgtg catg
524

<210> 1662
<211> 174
<212> PRT
<213> Homo sapiens

<400> 1662
Met Gln Arg Ser Ser Val Gly Trp Asp Thr Glu Leu Gly Thr Ser Pro
1 5 10 15
Gly Cys Ala Trp Ala Asp Pro Pro Arg Cys Pro Asp Glu Ser Pro Gly
20 25 30
Pro Ala Ser Glu Lys Glu Trp Glu Leu Gly Pro Gly Gly Gly Arg Ser
35 40 45
Arg His Arg Ser Gln His Cys Pro Thr Leu Pro Ser Leu Pro Ala Glu
50 55 60
Ala Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Asn Val Leu Glu
65 70 75 80
Gly Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr
85 90 95
Pro Tyr Leu Arg Gln Cys Lys Val Leu Asn Pro Asp Asp Glu Glu Gln
100 105 110
Val Leu Ser Asp Pro Asn Leu Val Ile Arg Lys Arg Lys Val Gly Val
115 120 125
Leu Leu Asp Ile Leu Gln Arg Thr Gly His Lys Gly Tyr Val Ala Phe
130 135 140
Leu Glu Ser Leu Glu Leu Tyr Tyr Pro Gln Leu Tyr Lys Lys Val Thr
145 150 155 160
Gly Lys Glu Pro Ala Arg Val Phe Ser Met Ile Ile Asp Ala
165 170

<210> 1663
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
 60
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 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1664
 Xaa Val Leu Val Met Ile Thr Pro Ser Leu Gly Ile Tyr Phe Ser Gln
 1 5 10 15
 Arg Ser Gln Ile Ser Arg Thr Gln Asp Asp Glu Ala Arg Thr Arg Ala
 20 25 30
 Ser Ile Ser Thr Leu Gln Asp Glu Val Lys Arg Trp His Asp Pro Asp
 35 40 45
 Tyr Val Arg Ala Gln Ala Arg Ser Gln Leu Gly Trp Val Met Pro Gly
 50 55 60
 Glu Thr Gly Tyr Gln Val Ile Gly Glu Asn Gly Lys Val Ile Gly Ser
 65 70 75 80
 Thr Thr Ser Leu Asp Glu Lys Asp Pro Ala Ser Glu Ala Ser Ala Asp
 85 90 95
 Ala Arg Trp Trp Gln Glu Ala Cys Gly Ser Val
 100 105

<210> 1665
 <211> 431
 <212> DNA
 <213> Homo sapiens

<400> 1665
 gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctggt gatttggtgt tgctcgacgt caaatcggga
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcggttggtt ccccgatac
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
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gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcctggggtc
300
tggggcgctc acgccgtcgt taccocgggtg tttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1 5 10 15
 Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
 20 25 30
 Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
 35 40 45
 Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
 50 55 60
 Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
 65 70 75 80
 Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
 85 90 95
 Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
 100 105 110
 Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
 115 120

<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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 cgaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
 120
 tcccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
 180
 gacttctggt tagacactga aatacaaa gactgccaac gagctctggg caaagctgcc
 240
 ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
 300
 gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
 360
 gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
 420
 caatctggca ttcagggtgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
 480
 atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
 540
 aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
 600
 ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
 660
 tctacggtga aggctgtgtg gagcgagtgt gtctagtga ctcgaacacc aacgcgttct
 720
 tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
 780
 aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
 840
 tgtggcttct gcacctgtta tacttttggg tacgagtgg ctccacttag cttcgtaaag
 900

attagaaatt tccatgaaac acttaccac atataaattc tgtgtaaagc tttatttttt
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taaggtttta catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcattctcca ttgtgacaac ctttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtggttt ggttgactac atttgactac caccactgaa ggcggcggac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
 1320
 ggtaagggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttcgtaaggc acctcgggtc ggcattcgga aaaccacccc atcttgccag agtccttggt
 1440
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a
 1491

<210> 1670
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1670
 Met Pro Asp Trp Phe Phe Pro Phe Leu Ala Pro Ser Thr Ser Cys His
 1 5 10 15
 Asp Ser Pro Ser Glu Asn Thr Ala Pro Pro Leu Pro Phe Ser Val Met
 20 25 30
 Ser Ile Cys Ser Thr Pro Gln Pro Leu Ser Arg Ala Gln Val Leu Val
 35 40 45
 Ala Glu Gly Lys Ala Val Phe Glu Gly Leu Ser Lys Lys Glu Asp Gly
 50 55 60
 Ala Ala Leu Pro Arg Ala Arg Trp Gln Ser Val Cys Ile Ser Val Ser
 65 70 75 80
 Asn Gln Lys Ser Phe Leu Cys Gly Pro His Ser Arg Ser His Phe Gln
 85 90 95
 Ala Asn Tyr His Gln Gly Trp Glu Arg Gln Gly Leu Gly Ala Glu Leu
 100 105 110
 Gly Ile Thr Arg Leu Arg Arg Gly Trp Ser Phe Arg Cys Ser Phe Pro
 115 120 125
 Cys Ser Val Leu
 130

<210> 1671
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1671
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tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
120
gcaccccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg
180
gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg
240
gcagccccga cgttggtggc taacaccgat aactttttca cgtccccggc ttggacaacg
300
gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc
360
ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctggt tatcaccag
420
ctcgcaccta gg
432

<210> 1672
<211> 144
<212> PRT
<213> Homo sapiens

<400> 1672
Ala Arg Arg Gly Gly Arg Thr Pro Val Val Phe Pro Pro Leu Thr Thr
1 5 10 15
Thr Arg Pro Leu Ser Arg Arg Arg Lys Pro Met Ala Glu Thr Thr Ser
20 25 30
Pro Ala Gln Arg Lys Pro Thr Ala Ala Ser Arg Met Lys Pro Val Ser
35 40 45
Arg Val Gly Asp Thr Ile Phe Ala Gly Ala Ser Ser Val Ile Ala Ile
50 55 60
Ala Leu Ala Val Ile Val Ile Leu Met Phe Val Phe Leu Met Lys Thr
65 70 75 80
Ala Ala Pro Thr Leu Leu Ala Asn Thr Asp Asn Phe Phe Thr Ser Arg
85 90 95
Ala Trp Thr Thr Asp Gln Asn Pro Pro Ala Phe Gly Ile Gln Ala Leu
100 105 110
Leu Trp Thr Thr Val Ile Ser Ser Leu Leu Ala Leu Leu Ile Ala Val
115 120 125
Pro Leu Ser Val Gly Ile Ala Leu Phe Ile Thr Gln Leu Ala Pro Arg
130 135 140

<210> 1673
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1673
tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
60
gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
120
ggctcccagc gtctttttcca tgagccaaag gcctggctcct ggaggggggt gccctgcagc
180
tctgctggcc ttcttcacag ggagttcatt gctgggggtg gccctgcagg gacctccact
240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggt aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1674

Met	Ala	Leu	Tyr	Phe	Phe	Ile	His	Lys	Trp	Arg	Ile	Cys	Ile	Leu	Phe
1				5					10					15	
Ser	Gln	Ile	Leu	Pro	Ser	Pro	Cys	Cys	Ile	Leu	Leu	Leu	Pro	Leu	Pro
			20					25					30		
Ser	Thr	Val	Glu	Val	Pro	Ala	Gly	Pro	Pro	Pro	Ala	Met	Asn	Ser	Pro
			35				40					45			
Gly	Arg	Arg	Pro	Ala	Glu	Leu	Gln	Gly	Thr	Pro	Leu	Gln	Asp	Gln	Ala
	50					55				60					
Phe	Gly	Ser	Trp	Lys	Arg	Arg	Trp	Glu	Pro	Gly	Val	Thr	Glu	Gln	Thr
65				70				75						80	
Gly	Leu	Cys	Arg	Ala	Phe	Ile	Ser	Ser	Phe	Thr	Ala	Arg	Ser	Glu	Tyr
			85					90					95		
Ile	Lys	Thr	Gln	Arg	Pro	Trp	Gln	Thr	Pro	Gln	Arg	Leu	Glu	Cys	Ala
			100				105					110			

Arg

<210> 1675

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1675

gccggcgcac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc
 60
 gcgccaaccg cacgggcagc ctcccacacg ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcctt cgcactccac
 240
 ccgcacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgcaaagt
 300
 cgaccgctgg atgtgccacc accccgcnc tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
 atgcagcaac aggcgctccg ctcgctatcg atctgggata cggcgccgcc ccctggacca
 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
<211> 97
<212> PRT
<213> Homo sapiens

<400> 1676
Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
1 5 10 15
Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
20 25 30
Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
35 40 45
Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
50 55 60
Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
65 70 75 80
Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
85 90 95
Arg

<210> 1677
<211> 631
<212> DNA
<213> Homo sapiens

<400> 1677
nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctataacctg ggtgcagggtg
60
gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag
120
cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg
180
gtggggcctt tcggtaaatc ctacgatggg gggacgggggt cttattgctg caggtaatca
240
gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acacttacct
300
gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
360
tgctgcctcc cccggccgtg tccttcacga cactcccga tatatgaaga acagtgtcta
420
cgaggtggcc cacccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg
480
tagccacaaa taatgggcgg gatcgggtctt tccctcacca agacgcataa tttcccccg
540
gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
600
attggtgaag gaccgtaagg ctccgacgcg t
631

<210> 1678
<211> 78
<212> PRT

<213> Homo sapiens

<400> 1678

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Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10           15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
          20           25           30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
          35           40           45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
          50           55           60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65           70           75

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<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg ttaccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccgaa gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

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<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

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Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10           15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
          20           25           30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
          35           40           45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
          50           55           60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

65					70					75				80
Arg	Asn	Leu	Leu	Val	Glu	Asn	Ile	Ile	Asp	Ile	Tyr	Lys	Gln	Glu
														Cys
				85					90				95	
Ser	Ser	Arg	Pro	Leu	Gln	Lys	Gly	Ser	His	Pro	Met	Tyr	Lys	Glu
			100					105				110		His
Glu	Asp	Glu	Lys	Ile	Asn	Ile	Tyr	Cys	Leu	Thr	Cys	Glu	Val	Pro
			115				120				125			Thr
Cys	Ser	Met	Cys	Lys	Val	Phe	Gly	Ile	His	Lys	Ala	Cys	Glu	Val
	130					135				140				

<210> 1681
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1681
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 ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
 120
 tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
 180
 cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
 240
 ctggtccgtt acaagaagga gccttccggg tgcccgggtgt gtggcaagggt gttctcctgc
 300
 cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
 360
 tgcgggcgca agttcttccg cgtggatgtg ctcagg
 396

<210> 1682
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1682														
Glu	Phe	His	Asn	Cys	Arg	Thr	Asp	Asp	Lys	Thr	Phe	Gln	Cys	Glu
1				5				10				15		Met
Cys	Phe	Arg	Phe	Phe	Ser	Thr	Asn	Ser	Asn	Leu	Ser	Lys	His	Lys
			20					25				30		Lys
Lys	His	Gly	Asp	Lys	Lys	Phe	Ala	Cys	Glu	Val	Cys	Ser	Lys	Met
		35				40				45				Phe
Tyr	Arg	Lys	Asp	Val	Met	Leu	Asp	His	Gln	Arg	Arg	His	Xaa	Gly
	50				55					60				Arg
Ser	Ala	Ala	Ser	Glu	Ala	Xaa	Glu	Asp	Leu	Glu	Ala	Gly	Gly	Glu
65				70				75					80	Asn
Leu	Val	Arg	Tyr	Lys	Lys	Glu	Pro	Ser	Gly	Cys	Pro	Val	Cys	Gly
			85					90				95		Lys
Val	Phe	Ser	Cys	Arg	Ser	Asn	Met	Asn	Lys	His	Leu	Leu	Thr	His
		100					105				110			Gly
Asp	Lys	Lys	Tyr	Thr	Cys	Glu	Ile	Cys	Gly	Arg	Lys	Phe	Phe	Arg
	115					120					125			Val
Asp	Val	Leu	Arg											

130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

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60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacaccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgtg ctgtacgaca acgcccagat cggcgctcgg caccccaaca
300
tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgt acatgcacaa caagcatgag ctgccccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccgaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctctccccag gaggggaagg
660
aaaccggggc gccgga
676

<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

Xaa	Gly	Arg	Thr	Gly	Pro	Glu	Gln	Pro	Arg	Pro	Thr	Trp	Thr	Gln	Thr
1				5				10						15	
Pro	Arg	Arg	Ala	Cys	Arg	Trp	Ala	Cys	Gly	Trp	Cys	Ala	Ala	Trp	Thr
			20					25						30	
Gly	Ser	Gly	Ala	Ser	Arg	Thr	Ala	Ala	Arg	Ala	Ala	Trp	Ala	Arg	Trp
			35				40					45			
Trp	Ser	Leu	Ala	Ala	Thr	Ala	Ala	Pro	Arg	His	Pro	Thr	Ala	Gln	Trp
			50				55				60				
Ser	Cys	Ser	Gly	Thr	Arg	Ala	Arg	Ala	Pro	Thr	Thr	Ala	Pro	Ala	Thr
65					70					75				80	
Arg	Ala	Arg	Thr	Thr	Cys	Cys	Cys	Thr	Thr	Thr	Pro	Arg	Ser	Ala	Ser
			85					90						95	
Gly	Thr	Pro	Thr	Ser	Ser	Val	Thr	Ala	Ala	Arg	Ser	Thr	Gly	Cys	Gly
			100					105					110		
Gly	Cys	Ala	Gly	Ser	Ala	Val	Cys	Ala	Trp	Thr	Thr	Thr	Ser	Ala	Arg

1334

	115		120		125
Ser	Ala	Thr	Cys	Thr	Thr
	130		135		140
Thr	Arg	Pro	Leu	Thr	Arg
145			150		

Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
 Ala Leu Ser His

<210> 1685
 <211> 2740
 <212> DNA
 <213> Homo sapiens

<400> 1685
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 60
 cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
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2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

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 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

				405					410					415	
Leu	Arg	Leu	Arg	Leu	Val	Glu	Glu	Glu	Ala	Asn	Ile	Leu	Gly	Arg	Lys
				420					425					430	
Ile	Val	Glu	Leu	Glu	Val	Glu	Asn	Arg	Gly	Leu	Lys	Ala	Glu	Leu	Asp
				435					440					445	
Asp	Leu	Arg	Gly	Asp	Asp	Xaa	Ser	Thr	Ala	Arg	Pro	Thr	Arg	Ser	
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```
<210> 1687
<211> 326
<212> DNA
<213> Homo sapiens
```

```

<400> 1687
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120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgcgcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

```
<210> 1688
<211> 89
<212> PRT
<213> Homo sapiens
```

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
 1              5              10              15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
      20              25              30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
      35              40              45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
      50              55              60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65              70              75              80
Phe Glu Gln His Arg Thr Arg Val Pro
      85

```

```
<210> 1689
<211> 301
<212> DNA
<213> Homo sapiens
```

<400> 1689
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tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
120
ttggcctttt cccagtcctat taagcctaaa caaaccacat cactttacat caggcagatc
180
atgtggtacc agaattttcc agtttggcgg actatcttga tcaaatcaac taaattattg
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ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc
300
a
301

<210> 1690
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1690
Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His
1 5 10 15
Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu
20 25 30
Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
35 40 45
Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
50 55 60
Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His
65 70 75 80
Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu
85 90

<210> 1691
<211> 483
<212> DNA
<213> Homo sapiens

<400> 1691
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ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc
120
ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg cagagaaagg cctgggcctg
180
ggcctggcga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg
240
tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc
300
gcgcctgcc aagccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
360
gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
420
gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtga ggggtgtgcg
480
ccg
483

<210> 1692
<211> 161
<212> PRT
<213> Homo sapiens

<400> 1692
Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
1 5 10 15
Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
20 25 30
Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
35 40 45
Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
50 55 60
Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
65 70 75 80
Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
85 90 95
Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
100 105 110
Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
115 120 125
Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
130 135 140
Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
145 150 155 160
Pro

<210> 1693
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1693
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cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
120
actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtcttg cgagagtatc
180
cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
240
tccgggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg
300
gccacctccc tggataacgt gctgcggacc atg
333

<210> 1694
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1           5           10           15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
          50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
          100          105          110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

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120
cagcacacaa cacatcgggg cggttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatttct tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa ttctgacatc cctccaaagc
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tgagggtgaa tgcctctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1           5           10           15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```



```

      50      55      60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65      70      75      80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85      90      95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100      105      110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115      120      125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130      135      140
Glu Gly Tyr Leu
145

```

<210> 1697
 <211> 337
 <212> DNA
 <213> Homo sapiens

```

<400> 1697
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120
gccaagagct gcctccttgg gacaactggg gcggcagctg tgatcgaca tggettcagc
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240
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300
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337

```

<210> 1698
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1698
Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1      5      10      15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
20     25     30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
35     40     45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
50     55     60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65     70     75     80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
85     90     95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
100    105

```

<210> 1699
<211> 442
<212> DNA
<213> Homo sapiens

<400> 1699
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aatggtgtgg tgcgcggcaa gcgcacgaa cgcaccagcc tccacaagggt ttacgagaag
120
ggcattaacc tgccctgcctc tctatttgcc ctggatatca atggctcaac ggtggaaagc
180
accggcctgg gtctggacat cggatgatgt gaccgaatct gttatccaat ccccgacacc
240
ctgtgcaatg aaccctggca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
300
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360
tttgacgacc tcggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac
420
caggagaacg tgaatggccg gc
442

<210> 1700
<211> 147
<212> PRT
<213> Homo sapiens

<400> 1700
Xaa Ala Phe Leu Lys Asp His Pro Glu Val Leu Tyr Val Asp Leu Leu
1 5 10 15
Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr
20 25 30
Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu
35 40 45
Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
50 55 60
Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
65 70 75 80
Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
85 90 95
Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
100 105 110
Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
115 120 125
Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val
130 135 140
Asn Gly Arg
145

<210> 1701
<211> 8265
<212> DNA
<213> Homo sapiens

<400> 1701
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gggccggcgg gcggggcgca gagccaggca gcgcaggtat agccaggctg gagaaaagaa
120
gctgccacca tggttgcact ttcactgaag atcagcattg ggaatgtggt gaagacgatg
180
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240
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360
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420
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480
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2700
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										1860			1865			1870		
Thr	Lys	Ser	Asn	Thr	Ser	Pro	Glu	Glu	Leu	Gly	Pro	Leu	Ala	Asn	Gln			
										1875			1880			1885		
Leu	Thr	Ser	Asp	Tyr	Gly	Arg	Leu	Ala	Ser	Glu	Ala	Lys	Pro	Ala	Ala			
										1890			1895			1900		
Val	Ala	Ala	Glu	Asn	Glu	Glu	Ile	Gly	Ser	His	Ile	Lys	His	Arg	Val			
										1905			1910			1915		
Gln	Glu	Leu	Gly	His	Gly	Cys	Ala	Ala	Leu	Val	Thr	Lys	Ala	Gly	Ala			
										1925			1930			1935		
Leu	Gln	Cys	Ser	Pro	Ser	Asp	Ala	Tyr	Thr	Lys	Lys	Glu	Leu	Ile	Glu			
										1940			1945			1950		
Cys	Ala	Arg	Arg	Val	Ser	Glu	Lys	Val	Ser	His	Val	Leu	Ala	Ala	Leu			
										1955			1960			1965		
Gln	Ala	Gly	Asn	Arg	Gly	Thr	Gln	Ala	Cys	Ile	Thr	Ala	Ala	Ser	Ala			
										1970			1975			1980		
Val	Ser	Gly	Ile	Ile	Ala	Asp	Leu	Asp	Thr	Thr	Ile	Met	Phe	Ala	Thr			
										1985			1990			1995		
Ala	Gly	Thr	Leu	Asn	Arg	Glu	Gly	Thr	Glu	Thr	Ser	Ala	Asp	His	Arg			
										2005			2010			2015		
Glu	Gly																	

2035	2040	2045
Gln Ser Ser Val Ala Thr Ile Thr Arg Leu Ala Asp Val Val Lys Leu		
2050	2055	2060
Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu		
2065	2070	2075
Ile Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser		2080
2085	2090	2095
Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Trp		
2100	2105	2110
Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu		
2115	2120	2125
Leu Lys Thr Val Lys Ala Val Glu Asp Glu Ala Thr Lys Gly Thr Arg		
2130	2135	2140
Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe		
2145	2150	2155
Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile		2160
2165	2170	2175
Arg Met Thr Lys Gly Ile Thr Met Ala Thr Ala Lys Ala Val Ala Ala		
2180	2185	2190
Gly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser		
2195	2200	2205
Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr		
2210	2215	2220
His Pro Glu Val Ala Pro Asp Val Arg Leu Arg Ala Leu His Tyr Gly		
2225	2230	2235
Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu		
2245	2250	2255
Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His		
2260	2265	2270
Ser Lys Arg Val Ala Gly Ser Val Thr Glu Leu Ile Gln Ala Ala Glu		
2275	2280	2285
Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile		
2290	2295	2300
Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala		
2305	2310	2315
Lys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp		2320
2325	2330	2335
Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile		
2340	2345	2350
Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg		
2355	2360	2365
Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu		
2370	2375	2380
Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val		
2385	2390	2395
Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln		2400
2405	2410	2415
Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala		
2420	2425	2430
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln		
2435	2440	2445
Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys		
2450	2455	2460
Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Ala Phe		

2465	2470	2475	2480
Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly			
	2485	2490	2495
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu			
	2500	2505	2510
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln			
	2515	2520	2525
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His			
2530	2535	2540	

<210> 1703
 <211> 346
 <212> DNA
 <213> Homo sapiens

<400> 1703
 ggatcccag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta
 60
 ggaatctgtg atggagaaga atgactcctc ttcttctctg agtcctgtag taatgcattc
 120
 tctgctctac ccttctccat gactgctgcc tggctctgcc tagccttgct ctgatccaca
 180
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
 240
 gactctcctt tcgctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
 300
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctcgct
 346

<210> 1704
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1704
 Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
 1 5 10 15
 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
 20 25 30
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
 35 40 45
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
 50 55 60
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
 65 70 75 80
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
 85 90 95
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
 100 105

<210> 1705
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 1705

gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta
60
aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcctgaaggg ctggcttcta
120
ctggtgctcc aatcgagttg cagaaaggta tacaggggtg agcaagttta tttaatcctg
180
gttttggtg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
240
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
300
cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccct
360
cttccttcgg agctagc
377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
			35				40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
			50				55				60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
				85				90						95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc
60
catcacgcca agcgagtgtc catcatcggg gccgggctag ccggcatgga ggctgcgcga
120
gttctcagcg aacgcgcaca cgaacctctc atcgctcagg ccagcgacca cattggcgga
180
gtcatccttg cgggtggtca accttccttc aaggaggacg acctagctct gctggagtgg
240
taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
300

gatcttatcg cttecttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt
360
cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc
420
gacgcgt
427

<210> 1708
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1708
Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
1 5 10 15
Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
20 25 30
Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
35 40 45
Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
50 55 60
Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
65 70 75 80
Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
85 90 95
Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
100 105 110
Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
115 120 125
Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
130 135 140

<210> 1709
<211> 446
<212> DNA
<213> Homo sapiens

<400> 1709
acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga
60
ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
120
ctcctcttcc agccacatca tatctcagcc tcctggagga aactcccata gcttgtctct
180
tcagtccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
240
caggttggtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
300
tgcattgtga agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
360
gataactgta gcttatgtga aatcattgtt tctcagcctt gccagctatt tcaaaaccac
420
tgctgtgct cggtttgtca aaattt
446

<210> 1710
<211> 116
<212> PRT
<213> Homo sapiens

<400> 1710
Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
1 5 10 15
Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
20 25 30
Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
35 40 45
Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
50 55 60
Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
65 70 75 80
Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
85 90 95
Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
100 105 110
Phe Val Lys Ile
115

<210> 1711
<211> 426
<212> DNA
<213> Homo sapiens

<400> 1711
nggggggattc atgtagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
60
cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc
120
cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
180
agccaagcag cagaagcagt ggtgtctctggg gggctgggaa gtttttcccc caaataccca
240
cccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt
300
gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
360
gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gcccgaagat
420
ggatat
426

<210> 1712
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1712
Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

1       5       10       15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
20       25       30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
35       40       45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
50       55       60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
65       70       75       80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
85       90       95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
100      105      110
Glu Gly Pro Gln Asp Gly Tyr
115

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<210> 1713
 <211> 328
 <212> DNA
 <213> Homo sapiens

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<400> 1713
tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgatg aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgctcctgg
180
aatgagcctc actccctccc tgcctcaaggc agcccttcac ccagccgccg ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcattctg gctgggtgact cctggggg
328

```

<210> 1714
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 1714
Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1       5       10       15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
20       25       30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
35       40       45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
50       55       60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
65       70       75       80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
85       90       95
Ser Gly Trp

```

<210> 1715
<211> 489
<212> DNA
<213> Homo sapiens

<400> 1715
gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcgggtg tgggtgtaaaa
60
gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag
120
aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
180
ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggc
240
aatatgggtgt tttttggcca actcgggaagc cgggggtgtcg gggaagtcgg tccctgtaag
300
gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctcg ccaaggttcg
360
aactcattac cgtcgaatac gacgctgtcg ccacggcggt tgcgaatcg aatcctcaaa
420
gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
480
ctgacgcgt
489

<210> 1716
<211> 101
<212> PRT
<213> Homo sapiens

<400> 1716
Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
1 5 10 15
His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
20 25 30
Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
35 40 45
Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
50 55 60
Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
65 70 75 80
Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
85 90 95
Cys Ala Leu Thr Arg
100

<210> 1717
<211> 312
<212> DNA
<213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtccttgac ccatgcctc tccttcccca
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1718
 Met Ala Gly Pro Arg Lys Pro Pro Glu Lys Gly Pro Leu Leu Ser Met
 1 5 10 15
 Asp Leu Leu Ala Asp Pro Gln Gln Gln Glu Pro Cys Leu Pro Glu Asp
 20 25 30
 Cys Ser Leu Cys Leu Met Ser Gln Pro Gly Cys Ser Ala Thr Gly His
 35 40 45
 Ser Leu Phe Leu Cys Leu Ser Val Tyr Ser Ser Gly Ile Trp Gly Arg
 50 55 60
 Arg Gly Ile Gly Cys Arg Asp Ser Val Cys Leu Leu Glu Thr Arg Asn
 65 70 75 80
 Leu Ser Arg Ser Leu Gly Leu Phe Pro Leu Leu Leu Met Trp Phe Leu
 85 90 95
 Leu Arg Cys Met Pro
 100

<210> 1719
 <211> 404
 <212> DNA
 <213> Homo sapiens

<400> 1719
 tgatcaccac ggccctgcca ttttttgctg ggaccgcaga ccgtatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcaccat tggtngtgg tgccccggg gggt
 404

<210> 1720
<211> 126
<212> PRT
<213> Homo sapiens

<400> 1720
Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
1 5 10 15
Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
20 25 30
Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
35 40 45
Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
50 55 60
Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
65 70 75 80
Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
85 90 95
Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
100 105 110
Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
115 120 125

<210> 1721
<211> 529
<212> DNA
<213> Homo sapiens

<400> 1721
ccatggccac cctttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg
60
gtcgtgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
120
ggcactccct gcttgatca ggggatctgg gtttcattct cccagctcct cctgtcctct
180
gctgggcacc tgtgatgtcc aggcactccc tgcttgatt ggggatctg ggtttcatct
240
tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat
300
cgggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
360
tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgctcac
420
cctgtgactc tgcttcgggt gttgtcaaat gggggtcac ccaggaccg caccactggg
480
tcgtgtgcag gtttctgggg tggcagagtg cggtatgagt ggcacgcgt
529

<210> 1722
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1722

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1 5 10 15
 Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
 20 25 30
 Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
 35 40 45
 Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
 50 55 60
 Met Ser Arg His Ser Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
 65 70 75 80
 Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
 85 90 95
 Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
 100 105 110
 Phe Thr Gln Ala Pro Ser
 115

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tgggttgacg
 60
 ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
 120
 gggtttggcct ggcggctgtc aatggtgccca atcttcccgt tgagttgttg aatggcagtg
 180
 gcaaagttagg gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
 240
 tgcccaatgt gaatgccag tggcttctct ttgctggccg ccggctgtct tgttgccagt
 300
 gtcggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggatgatcg
 360
 tgcattcaat a
 371

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1 5 10 15
 Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
 20 25 30
 Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
 35 40 45
 Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
 50 55 60
 Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90						95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
			100					105					110		

<210> 1725
 <211> 807
 <212> DNA
 <213> Homo sapiens

<400> 1725
 ngtgacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
 60
 atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccct tctctaggac
 120
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
 180
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
 240
 gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
 300
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact
 360
 agtgctggag atactcgcca gggtgaggtg ctcaagaagg agctgctccg gacacaggag
 420
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac
 480
 cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg
 540
 gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
 600
 gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggac
 660
 gcagtggaga cgacgcttcg ggagacccag gaggaaaatg acgaattccg ccggcgcacg
 720
 ctgggttttg agcagcagct gaaggagact cgaggtcttg tggatggtgg ggaagcggtg
 780
 gaggcacgac tacgggacaa gctgcag
 807

<210> 1726
 <211> 230
 <212> PRT
 <213> Homo sapiens

<400> 1726
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val
 1 5 10 15
 Arg Gly Leu Gln Arg Glu Leu Glu Glu Thr Ser Glu Glu Thr Gly His
 20 25 30
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys
 35 40 45
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

<210> 1727
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1727
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 gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aagggacatt
 120
 atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag taccacaaca
 180
 acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
 240
 aatttcaaag ttaaaaccat caaacttcca actctagatc atacattaaa tgaaacagac
 300
 cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
 360
 caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
 420
 gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
 474

<210> 1728
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1728
 Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys


```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729
 <211> 470
 <212> DNA
 <213> Homo sapiens

```

<400> 1729
acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
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aggatcgacg tgtggctgtg gtcgggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaacccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggatcatc
240
aaccgatca cgaaaagagt cggcgccaaa ctgcggtcg aggcttacga agatctgtca
300
nngccccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgaccacca agaaggatcg tcgcgagatc gatcgggtcc gaggccggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcgg ccgaattggc
470

```

<210> 1730
 <211> 131
 <212> PRT
 <213> Homo sapiens

```

<400> 1730
His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

50 55 60
 Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
 65 70 75 80
 Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
 85 90 95
 Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
 100 105 110
 Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
 115 120 125
 Ser Arg Tyr
 130

<210> 1731
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 1731
 agcgctccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gcccctggaa
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 gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
 120
 ttgcccgag ccgcaccgca cgtcttcagc ccgaccgttg tcctgacctc tctgtcccgt
 180
 cccctgccc gtctcaccat ggccttctgg acacagctga tgctgctgct ctggaagaat
 240
 ttcattgtat gccggagaca gccggtccag ctcttggtcg aattgctgtg gcctctcttc
 300
 ctcttcttca tcctggtggc tgttcgccac tcccaccgc cctggagca ccatgaatgc
 360
 cacttccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca gggctctcat
 420
 tgtaattgta acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
 480
 agcaattca acgactccct ggtctcccgg ctgctacgtc ggagagaggc tgga
 534

<210> 1732
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 1732
 Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
 1 5 10 15
 Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
 20 25 30
 Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
 35 40 45
 Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
 50 55 60
 Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
 65 70 75 80
 Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

85 90 95
 Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly
 100 105 110
 <210> 1733
 <211> 409
 <212> DNA
 <213> Homo sapiens
 <400> 1733
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 ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac
 120
 gggcaactgc accctctgcg tcgaggacta ctcgcgcagg tacgcggcga ggatcctcaa
 180
 catcgtctcc gacggcaacg tcctgcagcg cgcacgccc gcacagccag cgtggctggt
 240
 tgggtgtggtc gcggggatca gcgaactccg atccgtacgt attctccage ctcgacgctt
 300
 accgggacac cactgggttt taggaccttc gctcgggtctc gatcgatggc gtgctgtcac
 360
 cgcggccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
 409

<210> 1734
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1734
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro
 1 5 10 15
 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn
 20 25 30
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
 35 40 45
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn
 50 55 60
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val
 65 70 75 80
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg
 85 90 95
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp
 100 105 110
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp
 115 120 125
 Leu Lys Ala Val Thr Arg
 130

<210> 1735
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 1735
ggcgccatgg tcatcagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca
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agcgcgcctt ttagttcgac gcacggtaaa gcccggtgcg atcgatgtag gccaggaccg
120
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
180
cggacaccgc aagcggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
240
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcgggttcg
300
tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct
342

<210> 1736
<211> 112
<212> PRT
<213> Homo sapiens

<400> 1736
Met Val Ile Ser Ile Met Cys Ser Ala Pro Ala Ala Arg Met Phe Val
1 5 10 15
Arg Ser Ser Ala Pro Phe Ser Ser Thr His Gly Lys Ala Arg Ala His
20 25 30
Arg Cys Arg Pro Gly Pro Arg Gln Ala Pro Gly Asn Val Pro Thr Ser
35 40 45
Arg Trp Pro Ala Val Asp Gly Ser Gly Trp Arg Thr Pro Gln Ala Gly
50 55 60
Ser Ala Arg Arg Met Gln Tyr Ser Arg Ser Ala Arg Ser Gly Pro Arg
65 70 75 80
Gly His Leu Pro Thr Ala Arg Pro Ala Gly Cys Ala Arg His Pro Ala
85 90 95
Val Arg Trp Arg His Pro Gly Val Ala Lys Pro Gly Cys Gly Asn Ala
100 105 110

<210> 1737
<211> 506
<212> DNA
<213> Homo sapiens

<400> 1737
acgcgtgttc accatgacct ggaccgcccc gcggcccgac gggtcgagcg cggaggagtc
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ggacgagacg actgtggtgg tccctgccat ctcagcgccc cacgggtacg acgtgcaggc
120
gtccggcgcc cacgtcacct cccaccaggg cgaccgggtg gcgcggttgc acctcaacca
180
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
240
ccgacctata agtctcccag acactttttac gaccggccct ccccttggg gtgggccccg
300
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cggcccccat ggagaacagt
360

aggatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
420
gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aaggtgactg
480
gttgccgtag tccatgcgag gccggc
506

<210> 1738
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1738
Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
1 5 10 15
Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
20 25 30
Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
35 40 45
Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
50 55 60
Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
65 70 75 80
Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
85 90 95
Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
100 105 110
Arg

<210> 1739
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1739
cgcggtattg aaaatgctgc tttttttact aaattaggac agcgtttaac cggcgcatta
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catcaagtga cggttgatgg atttgtttac cgtggtgata tgcggttacg cccttttgga
120
gagtctgggc cattggtag cacgtttaat tcaatagagg actattatca aaccatggt
180
cgagagtggg agtggtatgc catgggttaa gcccgtgtta ttggtgttga ggacgagtat
240
aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgattttagc
300
gctattgatt ctttgcaaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg
360
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420

<210> 1740
<211> 140
<212> PRT

<213> Homo sapiens

<400> 1740

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Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1           5           10           15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
 20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
 35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
 50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
 65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
 85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
100           105           110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
115           120           125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
130           135           140

```

<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

```

nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
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120
accgagacgg cccagcacga gccacgggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccgc gctggtag
378

```

<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1           5           10           15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
 20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35 40 45
Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly
50 55

<210> 1743
<211> 4121
<212> DNA
<213> Homo sapiens

<400> 1743
atcacgtaca actgcaagga ggagttccag atccatgatg agctgctcaa ggctcattac
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acgttggggc ggctctcgga caacacccct gagcactacc tgggtgcaagg ccgctacttc
120
ctgggtgcggg atgtcactga gaagatggat gtgctgggca ccgtgggaag ctgtggggcc
180
cccaacttcc ggaggtgca ggggtgggctc actgtgttcg gcatgggaca gcccagcctc
240
tcagggttca ggcgggtcct ccagaaactc cagaaggacg gacataggga gtgtgtcatc
300
ttctgtgtgc gggaggaacc tgtgttttct ctgctgacg atgaggactt tgtgtcctac
360
acacctcgag acaagcagaa ccttcatgag aacctccagg gccttggacc cggggtcagg
420
gtggagagcc tggagctggc catccggaaa gagatccacg actttgcca gctgagcgag
480
aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgcgtgtggc
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1980
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2940

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3000
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3660
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3960
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4020
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4121

<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
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Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

50	55	60
Gln Val Gln Gly Gly Leu Thr Val Phe Gly Met Gly Gln Pro Ser Leu		
65	70	75
Ser Gly Phe Arg Arg Val Leu Gln Lys Leu Gln Lys Asp Gly His Arg		80
	85	90
Glu Cys Val Ile Phe Cys Val Arg Glu Glu Pro Val Leu Phe Leu Arg		95
	100	105
Ala Asp Glu Asp Phe Val Ser Tyr Thr Pro Arg Asp Lys Gln Asn Leu		110
	115	120
His Glu Asn Leu Gln Gly Leu Gly Pro Gly Val Arg Val Glu Ser Leu		125
	130	135
Glu Leu Ala Ile Arg Lys Glu Ile His Asp Phe Ala Gln Leu Ser Glu		140
	145	150
Asn Thr Tyr His Val Tyr His Asn Thr Glu Asp Leu Trp Gly Glu Pro		155
	160	165
His Ala Val Ala Ile His Gly Glu Asp Asp Leu His Val Thr Glu Glu		170
	175	180
Val Tyr Lys Arg Pro Leu Phe Leu Gln Pro Thr Tyr Arg Tyr His Arg		185
	190	195
Leu Pro Leu Pro Glu Gln Gly Ser Pro Leu Glu Ala Gln Leu Asp Ala		200
	205	210
Phe Val Ser Val Leu Arg Glu Thr Pro Ser Leu Leu Gln Leu Arg Asp		215
	220	225
Ala His Gly Pro Pro Pro Ala Leu Val Phe Ser Cys Gln Met Gly Val		230
	235	240
Gly Arg Thr Asn Leu Gly Met Val Leu Gly Thr Leu Ile Leu Leu His		245
	250	255
Arg Ser Gly Thr Thr Ser Gln Pro Glu Ala Ala Pro Thr Gln Ala Lys		260
	265	270
Pro Leu Pro Met Glu Gln Phe Gln Val Ile Gln Ser Phe Leu Arg Met		275
	280	285
Val Pro Gln Gly Arg Arg Met Val Glu Glu Val Asp Arg Ala Ile Thr		290
	295	300
Ala Cys Ala Glu Leu His Asp Leu Lys Glu Val Val Leu Glu Asn Gln		305
	310	315
Lys Lys Leu Glu Gly Ile Arg Pro Glu Ser Pro Ala Gln Gly Ser Gly		320
	325	330
Ser Arg His Ser Val Trp Gln Arg Ala Leu Trp Ser Leu Glu Arg Tyr		335
	340	345
Phe Tyr Leu Ile Leu Phe Asn Tyr Tyr Leu His Glu Gln Tyr Pro Leu		350
	355	360
Ala Phe Ala Leu Ser Phe Ser Arg Trp Leu Cys Ala His Pro Glu Leu		365
	370	375
Tyr Arg Leu Pro Val Thr Leu Ser Ser Ala Gly Pro Val Ala Pro Arg		380
	385	390
Asp Leu Ile Ala Arg Gly Ser Leu Arg Glu Asp Asp Leu Val Ser Pro		395
	400	405
Asp Ala Leu Ser Thr Val Arg Glu Met Asp Val Ala Asn Phe Arg Arg		410
	415	420
Val Pro Arg Met Pro Ile Tyr Gly Thr Ala Gln Pro Ser Ala Lys Ala		425
	430	435
Leu Gly Ser Ile Leu Ala Tyr Leu Thr Asp Ala Lys Arg Arg Leu Arg		440
	445	450
Lys Val Val Trp Val Ser Leu Arg Glu Glu Ala Val Leu Glu Cys Asp		455
	460	465
	470	475
	480	

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<210> 1745
<211> 426
<212> DNA
<213> Homo sapiens
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1376

actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc
 420
 tcgcga
 426

<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
 1 5 10 15
 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
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 atcaccgccc ctgaaggcgt gttggaggca ccggcgggggt cgctcctcaa ggacggcacg
 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct gggtccagag
 240
 ggcgaggaaa ccgacctgtg ggcagggttct gttattagca acgctggaaa agtgacgctg
 300
 ttttttacct ccgtcaaggc cgacnaagac ggaaatccat cgggcagatg tcgccgacgg
 360
 caaagctacg cgt
 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1 5 10 15
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
 cccagcaggc aaagagagag gcctccctgg cttegagtgt caggggagcc gcgttccttc
 60
 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg
 120
 aaggggagga gagtgagggc caagaacgag ccttaagga gacgtcccaa gctggagcca
 180
 cccagggctg ggtctgggag tcctcagtgt ccacttgctc caggttaggg ggcttgcttc
 240
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
 300
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg
 360
 tggatgcctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc
 420
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggaggtg gggtctggtc
 480
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact
 540
 aggttgctc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc
 600
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggtc
 660
 tcatggggaa gcgctgggc actggggatt gcttgtggc cactcaactc ttggggcagt
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
780
tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc
840
aggacactga gga
853

<210> 1750
<211> 64
<212> PRT
<213> Homo sapiens

<400> 1750
Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
1 5 10 15
His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
20 25 30
Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
35 40 45
Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
50 55 60

<210> 1751
<211> 531
<212> DNA
<213> Homo sapiens

<400> 1751
ggccgcatcc cgcactctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat
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gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
120
gcatggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca
180
caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
240
atcgacctcc tggagcgggt ccgaggactc ggctgacga cggtcaccgt cattcatgac
300
ctcgacttgg ctgccgccta cgccgacgac ctcactgtgc tcgactcggg tcgcatgggt
360
gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttgggtgc
420
gacggtgagg tttggtcctc ctcgaggcgc ggettcacct ggaacgggct gcagacatga
480
cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
531

<210> 1752
<211> 159
<212> PRT
<213> Homo sapiens

<400> 1752
Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

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      1           5           10           15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr
      20           25           30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
      35           40           45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
      50           55           60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
65      70      75      80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
      85           90           95
Val Ile His Asp Leu Asp Leu Ala Ala Ala Tyr Ala Asp Asp Leu Ile
      100          105          110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
      115          120          125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
      130          135          140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr
145      150      155

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<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

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60
tgggaccga tggctctggg gactcagggc cgcctgctgc tggacaggga ttccaaggac
120
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
180
ccacccaga gaaggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
240
cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
300
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccctgc agatgctgtt
360
gggggacctg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
420
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa
480
gatgggaccc ttctctgcaa cgcctgtggg atcaggtaca agaaatacgg cactcgtgc
540
tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
600
ggagtgtccc tggaccccat tcaggaaggt taaaccagc ttcaccctgc tgagctgctg
660
cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
720
ggaaagagcc ggcctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac
780
ccaggcctca ggtggcagag cctgctaggg gtcaccagc ccttctccag tcagccttgg
840

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ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
900
aagtacagag atatgccgag
920

<210> 1754
<211> 210
<212> PRT
<213> Homo sapiens

<400> 1754
Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
1 5 10 15
Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
20 25 30
Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
35 40 45
Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
50 55 60
Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
65 70 75 80
Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
85 90 95
Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
100 105 110
Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
115 120 125
Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
130 135 140
Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
145 150 155 160
Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
165 170 175
Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
180 185 190
Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
195 200 205
Glu Gly
210

<210> 1755
<211> 437
<212> DNA
<213> Homo sapiens

<400> 1755
nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgct tggagtcacg
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ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
120
ttggttgtga cagattttct accaacaatg ccttgactt gcctgcaa atgtgttagat
180
gttcaggtga gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt
240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaatcgg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1756
 Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser Leu Ile Arg Thr Ala
 1 5 10 15
 Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe Leu Pro Thr Met Pro
 20 25 30
 Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala Gly Ser Phe Gly Leu
 35 40 45
 His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser Ile Gly Leu Leu Trp
 50 55 60
 Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu Thr Ile Glu Lys Glu
 65 70 75 80
 Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln Ala Glu Glu Lys Gly
 85 90 95
 Val Val Leu Asn Arg Pro Phe His Pro Ala Pro Pro Phe Asp Cys Leu
 100 105 110
 Trp Leu Cys Leu Tyr Ala Lys Leu Gly Glu Leu Cys Val Asp
 115 120 125

<210> 1757
 <211> 1297
 <212> DNA
 <213> Homo sapiens

<400> 1757
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 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccctttctgt gttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcacgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttgggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgccca
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagcccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccag atcggcggca cagatcccgt tccaagtccc caggatcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtotaaga agagccacaa gaagagccgg
 960
 agaggggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgaccct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
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Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
			35				40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
			50			55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70				75					80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85					90					95		
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
			100					105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
			115				120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
130					135				140						
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

145 150 155 160
 Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
 165 170 175
 Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
 180 185 190
 Ser Ser Glu Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
 195 200 205
 Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
 210 215 220
 Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
 225 230 235 240
 Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
 245 250 255
 Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
 260 265 270
 Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
 275 280 285
 Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
 290 295 300
 Lys Lys Ser Arg Arg Gly Asn Glu
 305 310

<210> 1759
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 1759
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 ggccctgggca gacacaatta ttgtcggaat ccagatgggtg atgccagacc ttggtgccat
 120
 gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
 180
 ggccctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
 240
 acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
 300
 ttcctttgtg gaggggtgct gatc
 324

<210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1760
 Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
 1 5 10 15
 Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
 20 25 30
 Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
 35 40 45
 Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

50 55 60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65 70 75 80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
85 90 95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
100 105

<210> 1761
<211> 351
<212> DNA
<213> Homo sapiens

<400> 1761
ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
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aataaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat tgtaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
240
acagtggggc caggtggtct tgcaccctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc cactcgggtc ctattggatc c
351

<210> 1762
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1 5 10 15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
20 25 30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
35 40 45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
50 55 60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65 70 75 80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
85 90 95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
100 105

<210> 1763
<211> 356
<212> DNA
<213> Homo sapiens

<400> 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttacccgtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc
 120
 accatccctt acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1764
 Ala Arg Arg Gly Arg Asp Val Glu Arg Ala Leu Thr Arg Phe Met Ala
 1 5 10 15
 Lys Thr Gly Glu Thr Gln Ser Leu Phe Lys Asp Asp Val Ser Thr Phe
 20 25 30
 Pro Leu Ile Ala Ala Arg Pro Phe Thr Ile Pro Tyr Leu Thr Ala Leu
 35 40 45
 Leu Pro Ser Glu Leu Glu Met Gln Gln Met Glu Glu Thr Asp Ser Ser
 50 55 60
 Glu Gln Asp Glu Gln Thr Asp Thr Glu Asn Leu Ala Leu His Ile Ser
 65 70 75 80
 Met Glu Asp Ser Gly Ala Glu Lys Glu Asn Thr Ser Val Leu Gln Gln
 85 90 95
 Asn Pro Ser Leu Ser Gly Ser Arg Asn Gly Glu Glu Asn Ile Ile Asp
 100 105 110
 Asn Pro Tyr Leu Arg Pro
 115

<210> 1765
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1765
 cggccgcatt cttcgtgact ggcgctccgc cgccggtgca aaagtgtcag gaaataccag
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 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggcg
 120
 gtgccgggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcggcc
 240
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnccgccgac ggccgccatg acgcaccgca ttgacgtgaa ccagggcgac gatgccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg
 180
 agggacaaaac ccacctggag tccgtcgttg tgcattgcccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagagggga tgatccggat cggttccggc gtatgcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1769
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcacgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgcct ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggcgtcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag
 420
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 1770
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
 1 5 10 15
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
 20 25 30
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
 35 40 45
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
 50 55 60
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
 65 70 75 80
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
 85 90 95
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala
 100 105 110
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
 115 120 125
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
 130 135 140
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
 145 150 155

<210> 1771
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
 60
 taataacagc ggggtgctgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
 120
 caacaggctt ctactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
 180
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
 240
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
 287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10					15		
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75					80		
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
			85					90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcgagggtg aacaggcgca cctcgacgtc
 60
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
 120
 cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag
 180
 acgatcatcg atgagttcat cgcctcggct ggctccaagt ggggtcagaa gtcgggagtc
 240
 gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcaactcgtc ggcccgtctg
 300
 gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccc
 360
 gcaagctaca gccatttatt gcgtcagcac gcg
 393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
 60
 cgggagggga tcgctagggg ggggtggggc ggcccggctt cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg ccacccccac ccagagggg aagctggagc
 180
 tgggaggctg cagaccagc ccaaggtgtg gccagggtg gctttcttgg gaggtttga
 240
 gcatcctgct tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

      1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20           25           30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50           55

```

<210> 1777
 <211> 370
 <212> DNA
 <213> Homo sapiens

```

<400> 1777
agcttcttat cactatcctt tagtgctttt tggcttacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcatctatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

<210> 1778
 <211> 123
 <212> PRT
 <213> Homo sapiens

```

<400> 1778
Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100          105          110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115          120

```

<210> 1779
 <211> 345

<212> DNA
 <213> Homo sapiens

<400> 1779
 ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
 60
 atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
 120
 gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtaggt gtgtatatct
 180
 ggggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
 240
 ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
 300
 atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
 345

<210> 1780
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1780
 Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
 1 5 10 15
 Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
 20 25 30
 Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
 35 40 45
 Val Cys Ile Cys Val Tyr Met
 50 55

<210> 1781
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 1781
 nacgcgtcat gctaaatttt gccctttatg gcaacatttt cgtcagaaca agcggaagag
 60
 aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
 120
 gatgtgaaca caacgcaaac tggttcaagc gccacgcca ttacacctgt acccttactg
 180
 cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac
 240
 aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
 300
 cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
 349

<210> 1782
 <211> 107
 <212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
      20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
      35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
      50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
      85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
      100           105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

```

gtgcacgact tgcagccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaaaat gggatgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtggcc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

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gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tctttctccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggctctata attcactgaa gtcaaggctg gtttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
 1380
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac agggctccac cgggtattcac attcttggtta gtgatcaggt aaatcaaadc
 1500
 atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaataact atgagaatca ttttcagaga gttgggaatc
 1620
 actttggaag aacttataac caagagtctc aggcaccta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
	50					55				60					
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
		100					105						110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

115	120	125
Asp Arg Leu Leu Asp Leu Asp	Ile Pro Met Ser Val Gly	Ile Ile Asp
130	135	140
Thr Arg Thr Asn Pro Gly Gln	Leu Asn Ala Val Glu Phe	Leu Trp Asp
145	150	155
Pro Ala Lys Arg Thr Ser Ala	Phe Ile Gln Val His Cys	Ile Ser Thr
165	170	175
Glu Phe Thr Pro Arg Lys His	Gly Gly Glu Lys Gly Val	Pro Phe Arg
180	185	190
Ile Gln Val Asp Thr Phe Lys	Gln Asn Glu Asn Gly Glu	Tyr Thr Asp
195	200	205
His Leu His Ser Ala Ser Cys	Gln Ile Lys Val Phe Lys	Pro Lys Gly
210	215	220
Ala Asp Arg Lys Gln Lys Thr	Asp Arg Glu Lys Met Glu	Lys Arg Thr
225	230	235
Ala His Glu Lys Glu Lys Tyr	Gln Pro Ser Tyr Asp Thr	Thr Ile Leu
245	250	255
Thr Glu Met Arg Leu Glu Pro	Ile Ile Glu Asp Ala Val	Glu His Glu
260	265	270
Gln Lys Xaa Val Gln Gln Ala	Asp Phe Ala Ala Asp Tyr	Gly Asp Ser
275	280	285
Leu Ala Lys Arg Gly Ser Cys	Ser Pro Trp Pro Asp Ala	Pro Thr Ala
290	295	300
Tyr Val Asn Asn Ser Pro Ser	Pro Ala Pro Thr Phe Thr	Ser Pro Gln
305	310	315
Gln Ser Thr Cys Ser Val Pro	Asp Ser Asn Ser Ser Pro	Asn His
325	330	335
Gln Gly Asp Gly Ala Ser Gln	Thr Ser Gly Glu Gln Ile	Gln Pro Ser
340	345	350
Ala Thr Ile Gln Glu Thr Gln	Gln Trp Leu Leu Lys Asn	Arg Phe Ser
355	360	365
Ser Tyr Thr Arg Leu Phe Ser	Asn Phe Ser Gly Ala Asp	Leu Leu Lys
370	375	380
Leu Thr Lys Glu Asp Leu Val	Gln Ile Cys Gly Ala Ala	Asp Gly Ile
385	390	395
Arg Leu Tyr Asn Ser Leu Lys	Ser Arg Ser Val Arg Pro	Arg Leu Thr
405	410	415
Ile Tyr Val Cys Arg Glu Gln	Pro Ser Ser Thr Val Leu	Gln Gly Gln
420	425	430
Gln Gln Ala Ala Ser Ser Ala	Ser Glu Asn Gly Ser Gly	Ala Pro Tyr
435	440	445
Val Tyr His Ala Ile Tyr Leu	Glu Glu Met Ile Ala Ser	Glu Val Ala
450	455	460
Arg Lys Leu Ala Leu Val Phe	Asn Ile Pro Leu His Gln	Ile Asn Gln
465	470	475
Val Tyr Arg Gln Gly Pro Thr	Gly Ile His Ile Leu Val	Ser Asp Gln
485	490	495
Val Asn Gln Ile Ile Cys Phe	Ser Phe Ser Asp Trp Tyr	Leu Leu Leu
500	505	510
Tyr Met		

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcaciaa tgcctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55					60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70					75					80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85						90					95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
			100					105					110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
		115					120					125			

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaaag atttaattgt
 60
 aggggtcacct aacaaggaga tgagaacaaa ctttaaattct atctctctaa ggaatttgga
 120
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacaggggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
240
gtggaagggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
294

<210> 1788
<211> 91
<212> PRT
<213> Homo sapiens

<400> 1788
Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
1 5 10 15
Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
20 25 30
Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
35 40 45
Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
50 55 60
Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
65 70 75 80
Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
85 90

<210> 1789
<211> 353
<212> DNA
<213> Homo sapiens

<400> 1789
ttccacacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
60
cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
120
gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
180
gacctgtctc ccgggggtctc tccgcaggc aggtctctctc gccgagtctc cgaaaagggg
240
cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatctc ccgcttctct
300
ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccctggcg cgc
353

<210> 1790
<211> 105
<212> PRT
<213> Homo sapiens

<400> 1790
Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
1 5 10 15
Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
20 25 30
Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala


```

      35          40          45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50          55          60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65          70          75          80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85          90          95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100          105

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<210> 1791
 <211> 355
 <212> DNA
 <213> Homo sapiens

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<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
 60
acccccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
 120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtccttgc
 180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
 240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
 300
ccactccgat tccattccc tctgtgctc tctctctct cctcccttca cgcgt
 355

```

<210> 1792
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
 1          5          10          15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20          25          30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35          40          45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50          55          60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
 65          70          75          80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85          90          95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100          105

```

<210> 1793
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 1793

tgggttcag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatate
 60
 caccctctcg gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcacctc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggtt gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcattgttg atggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccctcat cccctgcgtt cctgcccacc tcgcccactg
 360
 ggcgctgatc cttggcccat gtcaagactg agtcactaag aatgttgaag aactggcacc
 420
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55				60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65				70					75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90					95		
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
		100					105					110			
Pro	Thr	Gly	Arg												
		115													

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttcctt gggctgatca
 60
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccccttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttct
180
taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca
240
tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggc
300
tctccagggt gagagctcca tgagggcacc aatttttctc tgtttagctg tgcctcaaa
360
gcaaggaagg gttgatccgg tctaga
386

<210> 1796
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1796
Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser
1 5 10 15
Phe Thr Val Tyr Met Glu Arg Leu Ile Ile Lys Gln Lys Ile Ala Asp
20 25 30
Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg
35 40 45
Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu
50 55 60
Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly
65 70 75 80
Glu Val Thr Gln Ser Ile
85

<210> 1797
<211> 348
<212> DNA
<213> Homo sapiens

<400> 1797
aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
60
cggaatttgc cgatgtcatt gatcagggtca tctgtctggg ctgcccgcag cagggctcgc
120
gtgccgctaa tttgttggcg ccatttgctg gcggcgcac cgtcaaattg tgtatcacag
180
cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc
240
acagatggac aacctggtgt tgccggtgac ctcggcaatt ttaccgggaa tgacccatgt
300
ggcgggtggat tacctggggc attgttcggt attgtacagc ccacgcgt
348

<210> 1798
<211> 108
<212> PRT
<213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100           105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tctgctgggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccaggcgg
120
tcgattatct cagagggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tgggtcatcg aacgggttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcgtg ctcgtcctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

	85		90		95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val					
	100		105		110
Leu Met Ser Ile Phe Met Leu Ile Val His					
	115		120		

<210> 1801
 <211> 597
 <212> DNA
 <213> Homo sapiens

<400> 1801
 aattttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
 60
 actaagccgg cagaacaggg cggattgggt ttcgatcctg ccagcatctg ggtgacggtc
 120
 cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
 180
 cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
 240
 catatggggg ttcccggccc cggcgggccc tgctcggaaa tctacatcga tcgtggccca
 300
 gcctatggtc ccgacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
 360
 ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
 420
 ggcccattgc gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcctaccta
 480
 ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg
 540
 tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
 597

<210> 1802
 <211> 199
 <212> PRT
 <213> Homo sapiens

Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala					
1	5		10		15
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp					
	20		25		30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp					
	35		40		45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly					
	50		55		60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp					
	65		70		75
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile					
	85		90		95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu					
	100		105		110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu					

```

      115      120      125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130      135      140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145      150      155      160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165      170      175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180      185      190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803
 <211> 708
 <212> DNA
 <213> Homo sapiens

```

<400> 1803
cccacaacga tggccgtcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcaccctgg ccctcatctc cgagatcggc accggtgggg gacaaggcca tatggtcgag
120
tatcgccggc aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgctgggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804
 <211> 236
 <212> PRT
 <213> Homo sapiens

```

<400> 1804
Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1      5      10      15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
20      25      30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

1404

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
720
atgttcgaga ccgccccgca aatcgaagcc ctcgccaaca ccgtcgagga caatgggtggc
780
gcctactttg tgccggcctt ctctggcctg ttcgcgccgt actggcgtcc gga
833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1			5						10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75				80	
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
				85					90					95	
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
	115					120						125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
	130					135						140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155				160	
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165						170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185					190		
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
	195						200						205		
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210					215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235				240	
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245					250					255		
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
		260						265					270		
Pro	Tyr	Trp	Arg	Pro											
		275													

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807

nnntatcggc aaggtggtcg aaatggtctt tgactatgtc aacggtgaca cgtgcgccgc
60
gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
120
acaggcacac cgggtgcgtgg tgggtctcaca ttccgagaag gccactacat atgcgaggcg
180
gtagctgaga ccggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
240
aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcgttc ggcgctgggg
300
gagacgttct tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
360
cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1				5					10					15	
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly	Gly
			20					25					30		
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu	Thr
		35				40					45				
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu	Glu
	50					55				60					
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Ile	Arg
65					70				75					80	
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu								
							85								

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccggtga tcgcatcggc gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
60
cagaccggtg tcacgcatgc gtatcgcttc gggcatggca gcctcctcgt gatgcggggc
120
cccacccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
180
gtgaacctga cgtttcggcg cgtgatgccg gtcggtagtg gccggtaaca accggcgctc
240
ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
300
tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
340

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttggtg
 120
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
 180
 caggtactgg aaaagaagg c gatgcactg ctacacgcag gtcagctcat ggaggccgctc
 240
 gagtgtctatg ctcaggccca gacaccggcc tttgaacagg ttgtgcttcc tttgatggac
 300
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
 360
 caagctcgcg tgcctcgtct catgctggct acttggtctca ttgaattgta tgtggccgccc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acacttgagc ggcatcatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35      40      45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
  50      55      60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
  65      70      75      80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85      90      95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100      105      110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115      120      125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130      135      140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
  145      150      155      160
Thr Leu Glu Arg His His
      165

```

<210> 1813
 <211> 426
 <212> DNA
 <213> Homo sapiens

```

<400> 1813
tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataagggtt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcttccttat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatgggt tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

<210> 1814
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1814
Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1      5      10      15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20      25      30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35      40      45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

50	55	60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro		
65	70	75
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn		80
	85	90
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu		95
100	105	

<210> 1815
 <211> 303
 <212> DNA
 <213> Homo sapiens

<400> 1815
 ggcgccacaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
 60
 cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
 120
 cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
 180
 ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
 240
 ccggttccag cagtggaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
 300
 acc
 303

<210> 1816
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1816
 Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
 1 5 10 15
 Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
 20 25 30
 His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
 35 40 45
 Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
 50 55 60
 Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
 65 70 75 80
 Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
 85 90 95
 Gly Thr

<210> 1817
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgagg ccacacagtg tacatcttaa catcacattt cgatgcgtcg
60
catgcgtttg agcccacacg cgatggcaca cttcaggtca ttcacgcaaa gacatggatc
120
ccgcgtcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt
180
gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg
240
tacaggggcg gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac
300
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413

<210> 1818
<211> 83
<212> PRT
<213> Homo sapiens

<400> 1818
Xaa Ser Leu Gln Asp Arg Gly His Thr Val Tyr Ile Leu Thr Ser His
1 5 10 15
Phe Asp Ala Ser His Ala Phe Glu Pro Thr Arg Asp Gly Thr Leu Gln
20 25 30
Val Ile His Ala Lys Thr Trp Ile Pro Arg Ser Leu Phe His Met Leu
35 40 45
His Leu Arg Trp Pro Phe Ala Ala Val Phe Ser Leu Val Met Gln Val
50 55 60
Val Val Ala Ala Tyr Gly Ser Ser Leu Ala Arg His Leu Pro His Val
65 70 75 80
Tyr Arg Ala

<210> 1819
<211> 343
<212> DNA
<213> Homo sapiens

<400> 1819
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120
aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa
180
gtagtccagg agaagaagg gttagagggt catgtggaga aaggaatgca acataaccaa
240
aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattgtt
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343

<210> 1820

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1820
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1 5 10 15
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
 20 25 30
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
 Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
 85 90 95
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
 100 105 110
 Arg Met

<210> 1821
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1821
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 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag
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 gcccgggaaa agttgctcgc caaggaggcc gccacgcgga tgacctagat tgtctactgc
 180
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa
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 285

<210> 1822
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1822
 Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
 1 5 10 15
 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
 20 25 30
 Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
 35 40 45
 Glu Ala Ala Gln Arg Met Thr
 50 55

<210> 1823
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1823
ngttggctgc tgttgctggg cgttctgtcc ctgacgggct gcgcccgttc cgatgcgctg
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120
tgtgagcaga tttatatgcc gcagggtaaa gcgcagggct ttagcgtgct gcaaaaccg
180
cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagccg
240
ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttaccg
300
ctggccgccc agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc
360
gcttacggcc gcagccagaa ccaattg
387

<210> 1824
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1824
Xaa Trp Leu Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg
1 5 10 15
Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
20 25 30
Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
35 40 45
Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
50 55 60
His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
65 70 75 80
Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
85 90 95
Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
100 105 110
Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
115 120 125
Leu

<210> 1825
<211> 413
<212> DNA
<213> Homo sapiens

<400> 1825
gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg
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tgcgtgcata ccgctgctct ggcaggctgt gcgtgctgatt gtcgccgaca catcggcggc
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ttggcacgtc gtgattgggc gcctaggcac catgtcgcag gccgacatgg acatgtgggc
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240
gatgcctggc ctacgggcac gcgatgcac ggtgggtctac ctgtcggaca tgccgctggg
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tctggcctca ggtgcgtggc cgatccgcgt gcctcgctcg gcgttatgtg tctgccggcg
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cctatgccat tcctctcgtg cagctacgtc acctggctga tctcgacgcg gct
413

<210> 1826
<211> 124
<212> PRT
<213> Homo sapiens

<400> 1826
Met Gly Arg Arg Arg Cys Val Cys Val His Thr Ala Ala Leu Ala Gly
1 5 10 15
Arg Ala Cys Asp Cys Arg Arg His Ile Gly Gly Leu Ala Arg Arg Asp
20 25 30
Trp Ala Pro Arg His His Val Ala Gly Arg His Gly His Val Gly Val
35 40 45
Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys
50 55 60
Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu
65 70 75 80
Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro
85 90 95
Arg Ala Ser Leu Gly Val Met Cys Leu Pro Ala Pro Met Pro Phe Ile
100 105 110
Ser Cys Ser Tyr Val Thr Trp Leu Ile Ser Thr Arg
115 120

<210> 1827
<211> 345
<212> DNA
<213> Homo sapiens

<400> 1827
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240
aagtgaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac
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345

<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
 Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp
 1 5 10 15
 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
 20 25 30
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
 85 90 95
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
 100 105 110
 Glu Thr Ala
 115

<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

<400> 1829
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 420
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 660
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 720

ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtga
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1140
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2340

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 4457

<210> 1830
 <211> 1377
 <212> PRT
 <213> Homo sapiens

<400> 1830
 Ile Pro Met Val Val Ser Asp Phe Asp Leu Pro Asp Gln Gln Ile Glu
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 Ile Leu Gln Ser Ser Asp Ser Gly Cys Ser Gln Ser Ser Ala Gly Asp
 20 25 30
 Asn Leu Ser Tyr Glu Val Asp Pro Glu Thr Val Asn Ala Gln Glu Asp
 35 40 45
 Ser Gln Met Pro Lys Glu Ser Ser Pro Asp Asp Val Gln Gln Val
 50 55 60
 Val Phe Asp Leu Ile Cys Lys Val Val Ser Gly Leu Glu Val Glu Ser
 65 70 75 80
 Ala Ser Val Thr Ser Gln Leu Glu Ile Glu Ala Met Pro Pro Lys Cys
 85 90 95
 Ser Asp Ile Asp Pro Asp Glu Glu Thr Ile Lys Ile Glu Asp Asp Ser
 100 105 110
 Ile Arg Gln Ser Gln Asn Ala Leu Ser Asn Glu Ser Ser Gln Phe
 115 120 125
 Leu Ser Val Ser Ala Glu Gly Gly His Glu Cys Val Ala Asn Gly Ile
 130 135 140
 Ser Arg Asn Ser Ser Ser Pro Cys Ile Ser Gly Thr Thr His Thr Leu
 145 150 155 160
 His Asp Ser Ser Val Ala Ser Ile Glu Thr Lys Ser Arg Gln Arg Ser
 165 170 175
 His Ser Ser Ile Gln Phe Ser Phe Lys Glu Lys Leu Ser Glu Lys Val
 180 185 190
 Ser Glu Lys Glu Thr Ile Val Lys Glu Ser Gly Lys Gln Pro Gly Ala
 195 200 205
 Lys Pro Lys Val Lys Leu Ala Arg Lys Lys Asp Asp Asp Lys Lys Lys
 210 215 220
 Ser Ser Asn Glu Lys Leu Lys Gln Thr Ser Val Phe Phe Ser Asp Gly

225					230					235					240
Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp	Ile	Ser	Glu
				245					250					255	
Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser	Pro	Asn	Phe
			260					265					270		
Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu	Gln	Leu	Tyr
		275					280					285			
Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys	Ala	Ile	Leu
	290					295					300				
Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr	Thr	Ser	Val
305					310					315					320
Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn	Leu	Leu	Ala
			325					330					335		
Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser	His	Ile	Pro
		340					345					350			
Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile	Glu	Ile	Leu
	355					360					365				
Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro	Thr	His	Val
	370					375					380				
Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met	Gln	Met	Met
385					390				395						400
Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala	Lys	Val	Ile
			405					410					415		
Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp	Met	Leu	Ser
		420					425					430			
Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu	Ser	Ser	Ile
	435					440					445				
Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly	Lys	Asn	Leu
	450				455					460					
Val	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp	Ser	Leu	Ile	Asn	Phe	Ser
465					470				475						480
Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln	Leu	Leu	Lys
			485					490					495		
Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met	Thr	Ile	Pro
		500					505					510			
Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp	Leu	Glu	His
	515						520					525			
Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu	His	Ala	Gln
	530					535					540				
Pro	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile	Arg	Ala	Leu
545					550					555					560
His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile	Gly	Leu	Ile
			565					570					575		
Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg	Val	Val	Val
		580					585					590			
Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu	Ile	Gln	Gln
	595					600					605				
Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu	Trp	Met	Ala
	610				615					620					
Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Leu	Glu	Gly	Ile	Thr
625					630				635						640
Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln	Tyr	His	Gln
			645					650					655		
Leu	Leu	Val	Ser	Val	Asp	Gln	Lys	His	Leu	Phe	Glu	Ala	Arg	Ser	Gly

	Ile	Leu	Ser	660 Ile	Leu	His	Met	Ile	Met	Ser	Ser	Val	Thr	Leu	Leu	Trp
				675				680					685			
Ser	Ile		Leu	His	Gln	Ala	Asp	Ser	Ser	Glu	Lys	Met	Thr	Ile	Ala	Ala
			690				695					700				
Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys	Asn	Leu	Arg	
705					710					715						720
Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn	His	Gly	Val	
				725				730						735		
His	Phe	Met	Ala	Ala	Ile	Ala	Phe	Val	Trp	Asn	Glu	Arg	Arg	Gln	Asn	
			740					745					750			
Lys	Thr	Thr	Thr	Arg	Thr	Lys	Val	Ile	Pro	Ala	Ala	Ser	Glu	Glu	Gln	
			755				760					765				
Leu	Leu	Leu	Val	Glu	Leu	Val	Arg	Ser	Ile	Ser	Val	Met	Arg	Ala	Glu	
			770				775				780					
Thr	Val	Ile	Gln	Thr	Val	Lys	Glu	Val	Leu	Lys	Gln	Pro	Pro	Ala	Ile	
785					790					795						800
Ala	Lys	Asp	Lys	Lys	His	Leu	Ser	Leu	Glu	Val	Cys	Met	Leu	Gln	Phe	
				805					810					815		
Phe	Tyr	Ala	Tyr	Ile	Gln	Arg	Ile	Pro	Val	Pro	Asn	Leu	Val	Asp	Ser	
			820					825					830			
Trp	Ala	Ser	Leu	Leu	Ile	Leu	Leu	Lys	Asp	Ser	Ile	Gln	Leu	Ser	Leu	
			835				840					845				
Pro	Ala	Pro	Gly	Gln	Phe	Leu	Ile	Leu	Gly	Val	Leu	Asn	Glu	Phe	Ile	
			850			855					860					
Met	Lys	Asn	Pro	Ser	Leu	Glu	Asn	Lys	Lys	Asp	Gln	Arg	Asp	Leu	Gln	
865					870					875						880
Asp	Val	Thr	His	Lys	Ile	Val	Asp	Ala	Ile	Gly	Ala	Ile	Ala	Gly	Ser	
				885					890					895		
Ser	Leu	Glu	Gln	Thr	Thr	Trp	Leu	Arg	Arg	Asn	Leu	Glu	Val	Lys	Pro	
			900					905					910			
Ser	Pro	Lys	Ile	Met	Val	Asp	Gly	Thr	Asn	Leu	Glu	Ser	Asp	Val	Glu	
		915					920				925					
Asp	Met	Leu	Ser	Pro	Ala	Met	Glu	Thr	Ala	Asn	Ile	Thr	Pro	Ser	Val	
		930				935					940					
Tyr	Ser	Val	His	Ala	Leu	Thr	Leu	Leu	Ser	Glu	Val	Leu	Ala	His	Leu	
945					950					955						960
Leu	Asp	Met	Val	Phe	Tyr	Ser	Asp	Glu	Lys	Glu	Arg	Val	Ile	Pro	Leu	
				965					970					975		
Leu	Val	Asn	Ile	Met	His	Tyr	Val	Val	Pro	Tyr	Leu	Arg	Asn	His	Ser	
			980					985					990			
Ala	His	Asn	Ala	Pro	Ser	Tyr	Arg	Ala	Cys	Val	Gln	Leu	Leu	Ser	Ser	
		995					1000					1005				
Leu	Ser	G														

1090	1095	1100
Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu		
1105	1110	1115
Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe		1120
	1125	1130
Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp		1135
	1140	1145
Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln		1150
	1155	1160
Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val		1165
	1170	1175
Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser		1180
1185	1190	1195
Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe		1200
	1205	1210
Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln		1215
	1220	1225
Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu		1230
	1235	1240
Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val		1245
	1250	1255
Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu		1260
1265	1270	1275
Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu		1280
	1285	1290
Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe		1295
	1300	1305
Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly		1310
	1315	1320
Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys		1325
	1330	1335
Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln		1340
1345	1350	1355
Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys		1360
	1365	1370
		1375

Thr

<210> 1831
 <211> 508
 <212> DNA
 <213> Homo sapiens

<400> 1831
 nntcatgaaa ggagaggccg tatgccatt gtcaaaactca gtgcgcagtt cgtgcgcgaa
 60
 gcggtttgcc cgcccgaaa atccaagggtg gactattacg acaacgcact caaagggttc
 120
 atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac
 180
 ggcaagctgc gccaatgcaa gatcggtgat gctgctgcgg tcagctacga caaggcccgg
 240
 cagaaggcca tgcggttgcg ttggaagggtg gaatgggggg gcaatccatt ggaggagcgc
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac
 360
 atccacctgc accggaggaa ttttcagtcc acgctgagct tcctcaagtg ccatgtcctg
 420
 ccgcgctttg gagccaagca cctggacgaa atcacgacca acatgctggc cgaggctcac
 480
 caggatctgc gcacgaaggc ctacgcgt
 508

<210> 1832
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1832
 Xaa His Glu Arg Arg Gly Arg Met Pro Ile Val Lys Leu Ser Ala Gln
 1 5 10 15
 Phe Val Arg Glu Ala Val Cys Pro Pro Gly Lys Ser Lys Val Asp Tyr
 20 25 30
 Tyr Asp Asn Ala Leu Lys Gly Phe Ile Leu Glu Ala Arg Pro Ser Gly
 35 40 45
 Gly Lys Thr Phe Tyr Leu Arg Tyr His Asp Ser His Gly Lys Leu Arg
 50 55 60
 Gln Cys Lys Ile Gly Asp Ala Ala Ala Val Ser Tyr Asp Lys Ala Arg
 65 70 75 80
 Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
 85 90 95
 Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
 100 105 110
 Ile Arg Glu Thr Tyr Val Pro His Ile His Leu His Arg Arg Asn Phe
 115 120 125
 Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
 130 135 140
 Ala Lys His Leu Asp Glu Ile Thr Thr Asn Met Leu Ala Glu Ala His
 145 150 155 160
 Gln Asp Leu Arg Thr Lys Gly Tyr Ala
 165

<210> 1833
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 1833
 acgcgtgcga tggtgaagga gcgcttcggc atcgggcatg cgacgctgca ggttgaactg
 60
 tccggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt
 120
 ggcgcaaagc ggcatgatc gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca
 240
 gcggcttggg ctccgcttcc cagcgttccg gcggcgccca gccattttgg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggcgct gaaggatcg aaagtcatgc gccgtgacaa
360
aggaagatcg gcgacacagg agccgaagcg ccgccgcctg caataagcgc gcgcgatcgc
420
aattgtcggg
430

<210> 1834
<211> 122
<212> PRT
<213> Homo sapiens

<400> 1834
Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro
1 5 10 15
Arg Arg Ala Ala Ala Lys Gly Arg Arg Arg Ser Val Ala Gln Ser Gly
20 25 30
Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln
35 40 45
His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
50 55 60
Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
65 70 75 80
Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
85 90 95
Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala
100 105 110
Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln
115 120

<210> 1835
<211> 677
<212> DNA
<213> Homo sapiens

<400> 1835
natactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc
60
cccagtggca ccctatgcta ctgtggcacc cagcacttta gccaccccc aggccaggc
120
tctggccgc cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac
180
gctgcagcac cctcagggtta tcccgcacc ccaggcactg tcccaccctc agagcctcca
240
gcagcctcag ggcctgggcc accctcagcc catggcccaa acccagggtt tgggccaccc
300
tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
360
gaagatgcca gactcagatg cccccccgaa tgtgaccgtg tctacctcaa ctatccccct
420
ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tctgtcacca
480
gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca
540

gacgcgccaac cccagcccca ttagtcgcag tctgctcatc aatgcaagca cccgggtgtc
 600
 gacccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca
 660
 cgcgccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln
 1 5 10 15
 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
 20 25 30
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
 nntctagaac actctgcccc tgaatctgta cgggattgt ttggcccgtc acgaactcgt
 60
 acggtcgata tcaatatac tgggttttct tcacagtatt taccgcccc ctatggacca
 120
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca
 180
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg
 240
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcggnrtgtac
 300
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaaccg aattatcaag
 360
 gggaaatcta ccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgagg ttattgcac cttttcgagg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgac acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
 ncaatacaggc tgaacaccgc tgatatcacc cgtactttcc ccgtcaacgg aaaattttcc
 60
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttctctg gcaataaatt ccgcgacgac catgctgcag cgatgaatgt tctcgctcc
 180
 cgccttgagg actgggggct tatgccgggc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttgat gccgcacggc accagccacc atctagggtt ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50		55		60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly				
65		70		75
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly				80
	85		90	95
Leu Asp Val His				
100				

<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1841
 nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggccccgt
 60
 gtcgatccgg tggtcgagat cggcggtccc ggtacgctag cccaatcgat ggtcgccccg
 120
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg
 180
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg
 240
 cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag
 300
 catttccgc tcgaaaatct ccccgacgcg
 330

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1 5 10 15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
20 25 30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
35 40 45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
50 55 60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65 70 75 80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
85 90 95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
100 105 110

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
60
acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat
120
tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag
180
tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
240
tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
300
acataccacc acatgatgat cgaggtgcaa gagcatttgc ccatgatgca ggaggtcttc
360
catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
420
ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
473

<210> 1844
<211> 141
<212> PRT
<213> Homo sapiens

<400> 1844
Met Lys Ala Asn Ser Phe Glu Ser Arg Leu Thr Pro Ser Arg Phe Met
1 5 10 15
Lys Ala Leu Ser Tyr Ala Ser Leu Asp Lys Glu Asp Leu Leu Ser Pro
20 25 30
Ile Asn Gln Asn Thr Leu Gln Arg Ser Ser Ser Val Arg Ser Met Val
35 40 45
Ser Ser Ala Thr Tyr Gly Gly Ser Asp Asp Tyr Ile Gly Leu Ala Leu
50 55 60
Pro Val Asp Ile Asn Asp Ile Phe Gln Val Lys Asp Ile Pro Tyr Phe
65 70 75 80
Gln Thr Lys Asn Ile Pro Pro His Asp Asp Arg Gly Ala Arg Ala Phe
85 90 95
Ala His Asp Ala Gly Gly Leu Pro Ser Gly Thr Gly Gly Leu Val Lys
100 105 110
Asn Ser Phe His Leu Leu Arg Gln Gln Met Ser Leu Thr Glu Ile Met
115 120 125
Asn Ser Ile His Ser Asp Ala Ser Xaa Xaa Xaa Xaa Pro
130 135 140

<210> 1845
<211> 390
<212> DNA
<213> Homo sapiens

<400> 1845
aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtgga
60
gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg
120
aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
180

cgtgggtccc agcagtaccg tgctctcact gtccctgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacctg cgatcatggc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1846
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
 1 5 10 15
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 20 25 30
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
 35 40 45
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
 50 55 60
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
 65 70 75 80
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 85 90 95
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
 100 105 110
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
 115 120 125
 Trp Ile
 130

<210> 1847
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 1847
 cagccgtgct ttctcgctc aactcgggaa cggctatata gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtaaa gctggcgacc
 120
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tcctgccgga tggctcgggtg ttcgacttca gggagcgaga
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcgggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cgggtgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

```
<210> 1851
<211> 574
<212> DNA
<213> Homo sapiens
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<400> 1851
ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttcctgct gctcttcatg aagctcaggt ggttcctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acggggggaca gctggaccca gaacacgccc aatg
574
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```
<210> 1852
<211> 191
<212> PRT
<213> Homo sapiens
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<400> 1852															
Xaa	Ile	Gly	Glu	Ala	Phe	Arg	Thr	Gly	Asp	Leu	Asp	Ser	Lys	Pro	Asp
1				5					10					15	
Pro	Ser	Arg	Ser	Phe	Arg	Pro	Tyr	Arg	Ala	Glu	Asp	Asn	Asp	Ser	Tyr
			20					25					30		
Ala	Ser	Glu	Ile	Lys	Glu	Leu	Gln	Leu	Val	Leu	Ala	Glu	Ala	His	Asp
		35					40					45			
Ser	Leu	Arg	Gly	Leu	Gln	Glu	Gln	Leu	Ser	Gln	Glu	Arg	Gln	Leu	Arg
	50					55					60				
Lys	Glu	Glu	Ala	Asp	Asn	Phe	Asn	Gln	Lys	Met	Val	Gln	Leu	Lys	Glu
65					70					75					80
Asp	Gln	Gln	Arg	Ala	Leu	Leu	Arg	Arg	Glu	Phe	Glu	Leu	Gln	Ser	Leu

				85					90					95					
Ser	Leu	Gln	Arg	Arg	Leu	Glu	Gln	Lys	Phe	Trp	Ser	Gln	Glu	Lys	Asn				
				100				105					110						
Met	Leu	Val	Gln	Glu	Ser	Gln	Gln	Phe	Lys	His	Asn	Phe	Leu	Leu	Leu				
			115				120					125							
Phe	Met	Lys	Leu	Arg	Trp	Phe	Leu	Lys	Arg	Trp	Arg	Gln	Gly	Lys	Val				
			130			135					140								
Leu	Pro	Ser	Glu	Gly	Asp	Asp	Phe	Leu	Glu	Val	Asn	Ser	Met	Lys	Asp				
145					150				155					160					
Leu	Tyr	Leu	Leu	Met	Glu	Glu	Asp	Glu	Ile	Asn	Ala	Gln	His	Ser	Asp				
			165				170					175							
Asn	Lys	Ala	Cys	Thr	Gly	Asp	Ser	Trp	Thr	Gln	Asn	Thr	Pro	Asn					
			180				185					190							

<210> 1853

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1853

```

gccggcgccg accaagccac ggcattgcccc acccaccttg gaagaggtgt cgttccgcca
60
cgtcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcattggcag ttctgcgcat ctgcgaccac atggatggca aggtcggcac
180
gacgttttac ctggatgacg atgtcatttt tgctcgcgcca cagaagcagc gctcagccga
240
gggccagcga ctgaatacag agcccgtctc tttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tataaccaag ctatgatgat gccgtcgt
338

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<210> 1854

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1854

Met	Pro	His	Pro	Pro	Trp	Lys	Arg	Cys	Arg	Ser	Ala	Thr	Ser	Leu	Arg				
1				5				10					15						
Ser	Ala	Pro	Ser	Lys	Leu	Thr	Cys	Ser	Ser	Ala	Arg	Ser	Ile	His	Ser				
			20				25					30							
Ser	Leu	Arg	Arg	Ala	Trp	His	Phe	Cys	Ala	Ser	Arg	Thr	Thr	Trp	Met				
			35			40					45								
Ala	Arg	Ser	Ala	Arg	Arg	Phe	Thr	Trp	Met	Thr	Met	Ser	Phe	Leu	Ser				
			50			55				60									
Arg	His	Arg	Ser	Ser	Ala	Gln	Pro	Arg	Ala	Ser	Asp	Ser	Asn	Thr	Ser				
65				70				75					80						
Pro	Ser	Leu	Trp	Pro	Ser	Cys	Ser	Ser	Ala	Leu	Leu	His	Arg	Ile	His				
			85				90					95							
Ile	Pro	Lys	Leu																
			100																

<210> 1855
<211> 429
<212> DNA
<213> Homo sapiens

<400> 1855
gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
60
ccgagcgaaa cgcaggaaat cgtggcgcac gtcttgacc tggacaacca cgaggtcacg
120
gtgcagtgtc tgcgcattgg cgtgggcttt ggcggttaagg aaatgcagcc gcacgggttc
180
gccgcgatcg cagcactcgg cgcgacctg accgggacgac cggttcgact gcgactgacc
240
cgaaaccagg acatcaccat ctccggaag cgccacccat acctcgcgga gtgggacgtg
300
gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
360
tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
420
tattggatc
429

<210> 1856
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1856
Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
1 5 10 15
Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
20 25 30
Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
35 40 45
Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
50 55 60
Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
65 70 75 80
Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
85 90 95
Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
100 105 110
Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
115 120 125
Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
130 135 140

<210> 1857
<211> 393
<212> DNA
<213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcagatc atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcccag gagcagccac catcgccccg tcatgctgcg gcactcgata ccaatacggt
 240
 gcgcttcaac caatcgatct tggtcgaggc atgcgcacca tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5				10					15		
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35					40					45			
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55				60						
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65				70				75						80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgtcac caacttcctc tacttccgca agatggattt ggattttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattgtt
 180
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
 300
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
 60
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atgggtttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccatgcttat
 420
 cgttttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

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1         5         10         15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
20         25         30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
35         40         45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
50         55         60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
65         70         75         80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
85         90         95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
100        105        110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
115        120        125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
130        135        140
Ala
145

```

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

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nggatacctca cgcccgccat catacgtggg atatacgttga gcaaatacgt catgacgggg
60
tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgcgtgcgt
300
aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccatcgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctactgctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgtagt gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgtcatcacc tcttttagcgc tgggctggca ccccacggt
660
tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctcg actggccaac
780
ttggtataca tc
792

```

<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccca gagagccagc tgaggaggcc
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 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgcccgc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggtgc ctccgggctg
 360
 ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct
 480
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcagggt
 540
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa Arg Leu Ile Lys Gln Leu Thr Asp Met Gly Phe Pro Arg Glu Pro
 1 5 10 15
 Ala Glu Glu Ala Leu Lys Ser Asn Asn Met Asn Leu Asp Gln Ala Met
 20 25 30
 Ser Ala Leu Leu Glu Lys Lys Val Asp Val Asp Lys Arg Gly Leu Gly
 35 40 45
 Val Thr Asp His Asn Gly Met Ala Ala Lys Pro Leu Gly Cys Arg Pro
 50 55 60
 Pro Ile Ser Lys Glu Ser Ser Val Asp Arg Pro Thr Leu Leu Asp Lys
 65 70 75 80
 Asp Gly Gly Leu Val Glu Glu Pro Thr Pro Ser Pro Phe Leu Pro Ser
 85 90 95
 Pro Ser Leu Lys Leu Pro Leu Ser His Ser Ala Leu Pro Ser Gln Ala
 100 105 110
 Leu Gly Gly Val Ala Ser Gly Leu Gly Met Gln Asn Leu Asn Ser Ser
 115 120 125
 Arg Gln Ile Pro Ser Gly Asn Leu Gly Met Phe Gly Asn Ser Gly Ala
 130 135 140
 Ala Gln Ala Arg Thr Met Gln Gln Pro Pro Gln Pro Pro Val Gln Pro
 145 150 155 160
 Leu Asn Ser Ser Gln Pro Ser Leu Arg Ala Gln Val Pro Gln Phe Leu
 165 170 175
 Ser Pro Gln Val Gln Ala Gln Leu Leu Gln Phe Ala Ala Lys Asn Ile
 180 185 190
 Gly Leu Asn Pro Ala Leu Leu Thr Ser Pro Ile Asn Pro Gln His Met
 195 200 205
 Thr Met Leu Asn Gln Leu Tyr Gln Leu Gln Leu Ala Tyr Gln Arg Leu
 210 215 220
 Gln Ile Gln Gln Gln Met Leu Gln Ala Gln Arg Asn Val Ser Gly

225

230

235

<210> 1867
<211> 518
<212> DNA
<213> Homo sapiens

<400> 1867
nnggggcacg gttagggcca gtgggcagag gggtagagga tatgcaggac cttccactgt
60
tccatgcatg ggacggcact tgggtccgag atcaggtagc caggcatgga aggaacatgg
120
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
180
tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttggtg cccggagagg
240
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
300
cctctctgc ctccaccct tccaccnng cagccccgc ctctcccgca gaactctccc
360
caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
420
gcgaggtgct ttgcacccc aagtatcat gttcccgtag ccagcctgcc aaggtgatgt
480
ggagcttggg gagcgggggc tggcagggtt tttccgga
518

<210> 1868
<211> 73
<212> PRT
<213> Homo sapiens

<400> 1868
Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
1 5 10 15
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
20 25 30
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
35 40 45
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
50 55 60
Gln Ala Arg Pro Pro Gly Pro Ala Ala
65 70

<210> 1869
<211> 436
<212> DNA
<213> Homo sapiens

<400> 1869
acgcgtcacc ttctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
60
ccgtgacatg ccgagcaccg aaaccacct gtggattcgc gagctgagcc gcatcgaccg
120

cgacgtgtcg actgccaccc actttcggtg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgagggttg tgccctgccca gcggtctact gccgtcggtg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggctcgacac cggcgaggcg acactgtcct tacgctggtt
 420
 cgacaccgtc aacagg
 436

<210> 1870
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1870
 Met Pro Ser Thr Glu Thr His Leu Trp Ile Arg Glu Leu Ser Arg Ile
 1 5 10 15
 Asp Arg Asp Val Ser Thr Ala Thr His Phe Arg Trp Ser Asp Asp Gly
 20 25 30
 Thr Val Leu Gly Gln Thr Thr Asp Asp Gly Thr Glu Pro Glu Val Val
 35 40 45
 Ala Leu Pro Ala Val Tyr Cys Arg Arg Cys Gly Arg Ser Gly Trp Gly
 50 55 60
 Val Gln Leu Ala Ser Thr Gly Asn Asn Leu Ser Glu Asn Asn Asp Ser
 65 70 75 80
 Ile Arg Arg Thr His Ala Ala His Asp Gly Arg Phe Arg Ala Leu Leu
 85 90 95
 Ser Ala Pro Arg Glu Gly Ala Ser Ala Val Asp Thr Gly Glu Ala Thr
 100 105 110
 Leu Ser Leu Arg Trp Phe Asp Thr Val Asn Arg
 115 120

<210> 1871
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1871
 nntgcagcgc cccgaggctg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacgggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcagggtattc cggactttcg ctgggtggc gggctttaca ccactcagca tgacctgcc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc
 300
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgcc tggagcaggc tggggaactt tgcacgatca ttaccagaa tattgacggc
 420
 ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggc gcac
 474

<210> 1872
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1872
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
 1 5 10 15
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
 20 25 30
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
 35 40 45
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
 50 55 60
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
 65 70 75 80
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
 85 90 95
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
 100 105 110
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
 115 120 125

<210> 1873
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 1873
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
 60
 ggttcctcgc gggatctcgc aggggagacc cccaccggg aggactggag gcagcgctc
 120
 tcccgcctcg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
 180
 ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgccagc gggagcgaag
 240
 ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
 300
 gcatatgagt caccaggaaa gttttttgaa acaaattt
 338

<210> 1874
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1874
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875
 <211> 366
 <212> DNA
 <213> Homo sapiens

```

<400> 1875
aagcttggcg tacaagtggc tcgtcgtttc tcaggtggcg gagccgtgta tcacgatatg
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ggcaatatct gcttctgctt cttacagaa gatgatggcg atagcttccg tgattttgga
120
aaattcacag aaccgtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaatct tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

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<210> 1876
 <211> 122
 <212> PRT
 <213> Homo sapiens

```

<400> 1876
Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

<210> 1877
<211> 357
<212> DNA
<213> Homo sapiens

<400> 1877
acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccattaa
60
cgaggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt
120
ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
180
tcaatttgac ccatttgata aacgacattg gggtgtctca catcatttac cacacgctgc
240
gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg
300
atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
357

<210> 1878
<211> 96
<212> PRT
<213> Homo sapiens

<400> 1878
Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser
1 5 10 15
Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile
20 25 30
Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp
35 40 45
Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser
50 55 60
Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn
65 70 75 80
Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro
85 90 95

<210> 1879
<211> 1062
<212> DNA
<213> Homo sapiens

<400> 1879
nacgcgtgga tgctccttgg acggcttttt cgtggtagag gggtcccggg gcgcgccgca
60
tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctcctt
120
gtccctccca caggctctga cgcccgtctt geggcttcgg tggttgaaca ggccacagtc
180
caggagcgtt tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
240

ttaagatcct gggtccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcacccatgc caatagtggg taagttgaag gaggccttga aaccgggccc caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt cctttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgtttt cccacggag cgactgtctc tgaggtggga gcgggtcttc
 660
 cgcgtgggcg caggactcca caacctggc aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgcagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgcat caagccgctc tccttcatcc gagacctgaa aaagatcgcc
 900
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac
 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagtgg atcgtcaaac gcaggctact
 1020
 accttgggtcc atcaaatttt tggagggtat ctcagatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40						45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50				55					60					
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
			100					105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
		115					120					125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
		130				135					140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

```

145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
          245          250

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<210> 1881
 <211> 358
 <212> DNA
 <213> Homo sapiens

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<400> 1881
natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
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aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

```

<210> 1882
 <211> 115
 <212> PRT
 <213> Homo sapiens

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<400> 1882
Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
1      5      10      15
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
20     25     30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
35     40     45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
50     55     60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65     70     75     80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
85     90     95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
100    105    110
Ile Arg Arg

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115

<210> 1883
<211> 367
<212> DNA
<213> Homo sapiens

<400> 1883
ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggct gctcagactt
60
gggctgggag aatgatacta agacaccaga catcacatcc attgctccca tccccactat
120
tgctgaaggc gatgagtctg tatttgtaa ctccaattca aacagctcga tggcgctcc
180
tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
240
gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
300
atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
360
cgatttn
367

<210> 1884
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1884
Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
1 5 10 15
Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
20 25 30
Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
35 40 45
Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
50 55 60
Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
65 70 75 80
Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
85 90 95
Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
100 105 110
Met Pro Ile Ala Gly Asp Xaa
115

<210> 1885
<211> 392
<212> DNA
<213> Homo sapiens

<400> 1885
nagcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtcc tcgacaccat
60

1444

gttcgacgat ctccgcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg
 120
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggtt ccaaccactg
 180
 aactggtgga tcctcgtcat tcccgggtctc gctgcgctca tcctgctggg gcgcaacgcc
 240
 actggtcggg ccgcggcagg actgggggtat ctcttcggca tcggtctgtt taccaccacc
 300
 atttcctggg taggcgtcat cggcccgccg gtggcgatac ttctcatcgc tgtcatggcg
 360
 ttgtggtgtc tgctggccgg gtggacgatt cg
 392

<210> 1886
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1886
 Xaa Ala Tyr Ser Gln Arg Met Ser Leu Arg His Arg Asp Ser Arg Arg
 1 5 10 15
 Pro Arg His His Val Arg Arg Ser Arg His Val Gly Asn Pro Val Ile
 20 25 30
 Ser Arg Leu Arg Arg Thr Ser Trp Leu Arg Ser Thr Ala Ala Val Ala
 35 40 45
 Ala Gly Ala Ala Thr Gly Thr Gly Phe Gln Pro Leu Asn Trp Trp Ile
 50 55 60
 Leu Val Ile Pro Gly Leu Ala Ala Leu Ile Leu Leu Val Arg Asn Ala
 65 70 75 80
 Thr Gly Arg Ala Ala Ala Gly Leu Gly Tyr Leu Phe Gly Ile Gly Leu
 85 90 95
 Phe Thr Thr Thr Ile Ser Trp Val Gly Val Ile Gly Pro Pro Val Ala
 100 105 110
 Ile Leu Leu Ile Ala Val Met Ala Leu Trp Cys Leu Leu Ala Gly Trp
 115 120 125
 Thr Ile
 130

<210> 1887
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1887
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 60
 gacttcttgg tgcaggggaa tttatatccc gatgtcgtcg agtctggtgg cggtaggggc
 120
 gctgccaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt
 180
 ctcggtgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
 240
 ggtctgcccg aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
 300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
 360
 cgt
 363

<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
 1 5 10 15
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
 20 25 30
 Val Glu Ser Gly Gly Gly Glu Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
 gcaccagatc tgctcatggc ggcgattgcg acggcaacgc agtcgatccg gcttgggtct
 60
 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacgggtt ttcgaccctc
 120
 acagcgtctc tcggtgatcg tatcgacatg gggctgggccc gggctcccgg cggtgacatg
 180
 ctctccgccc atgccctcaa tcagggggcag gtcacccgcc ctgaggccat taattccctc
 240
 atcgccgaaa cggtagggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag
 300
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
 360
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgcca gtttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc
 480
 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga
 530

<210> 1890

<211> 176

<212> PRT

<213> Homo sapiens

<400> 1890

Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
1 5 10 15
Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
20 25 30
Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
35 40 45
Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
50 55 60
Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
65 70 75 80
Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
85 90 95
Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
100 105 110
Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
115 120 125
Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
130 135 140
Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
145 150 155 160
Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
165 170 175

<210> 1891

<211> 423

<212> DNA

<213> Homo sapiens

<400> 1891

agatctcagg gagacagagg ggcccgggat aggaagaata tgtgggcacc tctcccacag
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120
cgtcaattta cagaggcagc ccagcttcct atcaactttc tggcctggct taacgggtgta
180
atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccgccctc ctccactctg
240
ggattttgta ccggtatggg gaggcactac ggttgacagat ttagcttttc agcgtggata
300
caagcaccga agtgtcccag accacagcag aaaccgtgtt gctgccgttt ccaacctgct
360
gatttggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg
420
tgc
423

<210> 1892

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
 1           5           10           15
Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
 20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
 35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
 50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
 65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
 85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
100           105           110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
115           120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcggt
120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tgggtgggtat agcgagtatg tcatgattac cggtcacgc
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
360
gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggcctggcag gccatgctgg cagcagtgcg cgactggcac
480
gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg
600
acctcatccg ggatgtgagt gccaggggta tcgatccccg gttccggacc ctccacgatc
660
atcaaatcca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgcgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894
<211> 191
<212> PRT
<213> Homo sapiens

<400> 1894
Thr Gly Gly Ala Glu Pro Ala Arg Val Ala Leu Pro Ser Arg Ile Tyr
1 5 10 15
Val Glu Gly Arg His Asp Ala Glu Leu Val Glu Lys Ile Trp Gly Asp
20 25 30
Asp Leu Arg His Val Gly Val Val Val Glu Tyr Met Gly Gly Met Asp
35 40 45
Asp Leu Val Gly Ile Val Ala Glu Phe Lys Pro Gly Pro Gly His Arg
50 55 60
Leu Gly Val Leu Val Asp His Leu Val Ala Asp Thr Lys Glu Ser Arg
65 70 75 80
Val Ala Asp Glu Val Arg Arg Gly Gly Tyr Ser Glu Tyr Val Met Ile
85 90 95
Thr Gly His Arg Phe Ile Asp Ile Trp Gln Ala Ile Lys Pro Gln Arg
100 105 110
Ile Gly Arg Gln Glu Trp Pro Glu Val Pro Met Asp Glu Asp Phe Lys
115 120 125
Leu Gly Thr Leu Lys Arg Leu Gly Leu Pro His Ser Thr Gln Ala Asp
130 135 140
Val Gly Lys Ala Trp Gln Ala Met Leu Ala Arg Val Arg Asp Trp His
145 150 155 160
Asp Leu Asp Pro Arg Phe Asn Thr Glu Met Glu Lys Leu Ile Asp Phe
165 170 175
Val Thr Arg Asp His Val Asp Glu Leu Asp Asn Gly Glu Met Ala
180 185 190

<210> 1895
<211> 2555
<212> DNA
<213> Homo sapiens

<400> 1895
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ttttttgttt ttgtttttgt ttttggtttc tttagaattt ttccctgttt cccaccttct
120
cttccctgt tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac
180
acaacttttag aaagttgctt gcagaacaaa aaggctacac aaaagcccac tggctctcaa
240
tacctcaag tggatggcag aggctcttgt tgaaagtggg caatttgcaa tctttgcatt
300
aggatttcag atgcatgcca ggtttccact gattgccaga actcgagatc actacacatg
360
gatcccaaaa atcaacatgg cagtggcagt tcgttagttg tgatccagca gccttctttg
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta
480
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtggtgaaa
540
agacctgctc ctcgacagc accaagacaa gaaaagcatg aaaggactca tgaaatcata
600
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta
660
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720
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780
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840
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900
gaacagtgtg ggaagtgcaa gtgtggagaa tgcactgctc ccaggaccct accatcctgt
960
ttggcctgta accggcagtg cctttgctct gctgagagca tggtaggaata tggaaacctgc
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1080
tcagataatc cttgctcctg ttcacaatca cactgctgct ctagatacct gtgtatggga
1140
gccatgtctt tatttttacc ttgcttactc tggtatcctc ctgctaaagg atgctgaag
1200
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1320
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1380
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1500
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1560
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1620
gtacatgaac atacaccac atccagacta cagtgtatta gagttgtttt gattgggtac
1680
cgtgggagca gggaaattgg ttttttaaaa agcaactgtt taattgctta aataagctat
1740
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1800
gggatataat ttttgcata acgtaaaaat tttcctttaa ccactgccct ctcctttctc
1860
cttcaagggt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat
1920
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1980
tattggttgg accttgccca tcttcactct agccttcgta tttgtgaagg actcagccac
2040

cttccttctt caccatgc ttctcaccaa atttttgttg tcattgaggg cacttggata
 2100
 actcaagttg atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa
 2160
 gtgatcttgg ctctttaatg gtccttttgg ccccttggat agttaacagc tgagtaattc
 2220
 taatctcttc tgtgttttcc ttgccttaac cacaaattgt ggtgcttttt gtatatattta
 2280
 tgtataaatc acaaagttga attctgacta tttttaagac aaaagtctgt taaacttttt
 2340
 tattgtaaag aatatttatt atgcgaatct ctattatttt atggtattta ttgcaaaaga
 2400
 ctggtgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg
 2460
 tgacacgaag aaagtacata tgtaactat aatgcagaaa atatattaat taatgaaaaa
 2520
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa
 2555

<210> 1896
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1896
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg
 1 5 10 15
 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala
 20 25 30
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile
 35 40 45
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn
 50 55 60
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met
 65 70 75 80
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala
 85 90 95
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg
 100 105 110
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu
 115 120 125
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser
 130 135

<210> 1897
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 1897
 cgtcatggct gctacgtgtg cggnaagagc tttgcctggc gctccacact ggtggagcac
 60
 gtctacagtc aactggcga gaagcccttc cactgcactg actgcggcaa gggcttcggc
 120

cacgcttcct cctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt
 180
 ctggagtgtg gccgggcctt cacgcagcgc tcggcgctga cttcgcacct gcgcgtccac
 240
 accggcgaga aaccctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgcggt gcacagcggc gagacccccct tccctgccc ggactgtggc
 360
 cgcgccttcg cctacccctc ggacctgcgg cgccacgtgc gcatccacac gggcgagaag
 420
 ccctaccctt gccagactg tgggcgccgc ttttcctcct cctccctgct ggtcagtcac
 480
 cggcgggcac actccggcga gtgcccctat gtttgtgacc agtgtggcaa acgtttctcc
 540
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 660
 acaggtgaaa aacccaccca gtgccctagc tgtggacgtc gcttcgccta cccctccctg
 720
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 780
 aagcgttttg ctcagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
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 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
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Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50					55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90					95		
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
	115						120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130					135					140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

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145          150          155          160
Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
          165          170          175
Lys Arg Phe Ser Gln Arg Lys Asn Leu Ser Gln His Gln Val Ile His
          180          185          190
Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
          195          200          205
Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
          210          215          220
Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
225          230          235          240
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
          245          250          255
Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
          260          265          270
Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
          275          280          285
Arg Ala Ser Ala Arg Gly Gly Leu Trp Leu Ser Thr Ser Val Ala Pro
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Arg Pro Gln Thr Val Ala Leu Asp
305          310

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<210> 1899
 <211> 508
 <212> DNA
 <213> Homo sapiens

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<400> 1899
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120
gaggaaatat caggccggct gcggaggaggaa ctggggccaaa gggacaggaa ccggggggcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgcac agacatggag ttacaccttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggccagta tgacgccg
508

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<210> 1900
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 1900
Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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      1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
      65           70           75

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<210> 1901
 <211> 453
 <212> DNA
 <213> Homo sapiens

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120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccgggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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<210> 1902
 <211> 151
 <212> PRT
 <213> Homo sapiens

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<400> 1902
Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
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Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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	115		120		125
Arg	Ala Thr Leu Ser Asp	Ala Ser Ala Thr Glu	Phe Arg Glu Met Lys		
	130	135	140		
Glu	Ile Leu Ile Glu Gly Gly				
145	150				

<210> 1903
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1903
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 120
 atttgtgcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
 180
 ctgctggggg attgctggtt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
 240
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta ccggggctcc
 300
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
 360
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 420
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
 480
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 531

<210> 1904
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1904
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser
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 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp
 20 25 30
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
 35 40 45
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
 50 55 60
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
 65 70 75 80
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
 85 90 95
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
 100 105 110
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
 115 120 125
 Met Pro Trp Trp Thr

130

<210> 1905
<211> 387
<212> DNA
<213> Homo sapiens

<400> 1905
acgcgtgggc tgatcggcat gctctgggca ctgggggtgg tggcgggaagt gctgatgttc
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120
ctcctggccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcgggtgctg
180
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240
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387

<210> 1906
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1906
Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu
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20 25 30
Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
35 40 45
Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
50 55 60
Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
65 70 75 80
Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
85 90 95
Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
100 105 110
Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
115 120 125
Val

<210> 1907
<211> 333
<212> DNA
<213> Homo sapiens

<400> 1907

1456

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120
ggcggcgaca cgtcgaaggc cacgttcttg acgggcctgc gccgatgac gccggacggc
180
acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg
240
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300
atgcccgcga tccaggccga cgacctgtct nnc
333

<210> 1908
<211> 111
<212> PRT
<213> Homo sapiens

<400> 1908
Thr Arg Phe Asp Gln Arg Ile Arg Val Gly Gly Met Ala Glu Ile Val
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Gly Phe Asp Lys Lys Leu Arg Ala Ala Arg Arg Glu Thr Leu Glu Met
20 25 30
Cys Val Asn Asp Leu Phe Pro Gly Gly Gly Asp Thr Ser Lys Ala Thr
35 40 45
Phe Trp Thr Gly Leu Arg Pro Met Thr Pro Asp Gly Thr Pro Ile Val
50 55 60
Gly Arg Thr Pro Val Ser Asn Leu Phe Leu Asn Thr Gly His Gly Thr
65 70 75 80
Leu Gly Trp Thr Met Val Cys Gly Ser Gly Gln Leu Leu Ala Asp Leu
85 90 95
Ile Ser Gly Lys Met Pro Ala Ile Gln Ala Asp Asp Leu Ser Xaa
100 105 110

<210> 1909
<211> 2767
<212> DNA
<213> Homo sapiens

<400> 1909
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120
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180
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240
gccctgcacg gccacgagct gcggccgggg gcgcgctcg tggaggaaat gtcgcgcca
300
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360
gaactgcgca gcctcttcga gcgcgcgga cgcgtcatcg agtgtgacgt ggtgaaagac
420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac
480
ggcaaagaag tgaaggga ggcacatcaac gtggaactct ccaccaaggg tcagaagaag
540
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600
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660
agcactggtg gctttgatgg gcaagcccg t cagccacac cacccttctt tggctcgcgac
720
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1140
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1680
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1800
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1860
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1920
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1980
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2040

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 2100
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 2160
 tataactact ctggcccata cctttcctgg ttgtggtttt tcatgccctc taccatgtgg
 2220
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 2280
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 2400
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 2460
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 2520
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 2580
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 2640
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 2760
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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

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			20					25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70				75					80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85					90					95		
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105					110			
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
	115					120					125				
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135					140					
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145					150				155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

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Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly												
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Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro												
																195				200				205			
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala												
																210				215				220			
Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln												
225																230				235				240			
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser												
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Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser												
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Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln												
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Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Ser	Leu	Gly	Pro											
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Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly	Gly											
305																310				315				320			
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser												
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Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala												
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Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln												
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Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr												
																370				375				380			
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala												
385																390				395				400			
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro												
																405				410				415			
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr												
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Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala												
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Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln												
																450				455				460			
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met												
465																470				475				480			
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly												
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Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu												
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Ala	Ala	Gln	Gln	His	Pro	Gln	Ala	Ala	Ala	Ser	Tyr	Arg	Gly	Gln	Pro												
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Gly	Asn	Ala	Tyr	Asp	Gly	Ala	Gly	Gln	Pro	Ser	Ala	Ala	Tyr	Leu	Ser												
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Met	Ser	Gln	Gly	Ala	Val	Ala	Asn	Ala	Asn	Ser	Thr	Pro	Pro	Pro	Tyr												
																565				570				575			
Glu	Arg	Thr	Arg	Leu	Ser																						

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
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Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
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Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
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<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

<400> 1911
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 240
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 339

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1912
 Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
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 Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
 20 25 30
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
 35 40 45
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
 50 55 60
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
 65 70 75 80
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
 85 90 95
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
 100 105 110
 Trp

<210> 1913
 <211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

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180
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240
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300
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
360
cagaattgcg tcgcagccac ccggaccttg ccatcaaggt ggcccgcccc accggaccag
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540
caatgctgtc caggctgacc cggctgtggc cccagcacca ccaccttcg gtccgcatcg
600
ccaccaatcg tgggtgggct actgcggctc agggagtcgt cggccgcctg cgacaggagg
660
ggcgccgtca tatcgcatg ggaagcctgt ggatttgca cgacgagaat ttccgcatte
720
atactcgcca ggctttgcat gccggtgccg aggttgtcgc cgcaccg
767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro
1 5 10 15
Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu
20 25 30
Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro
35 40 45
Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu
50 55 60
Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn
65 70 75 80
Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln
85 90 95
Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg
100 105 110
Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His
115 120 125
His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val

130	135	140
Glu Glu Val Val Ala Arg	Leu Arg Gln Glu Gly Arg Arg His Ile Ala	
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp	Glu Asn Phe Arg Ile His Thr	160
165	170	175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro		
180	185	190

<210> 1915
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 1915
 acgcgtccca ggccccacag gccccctctg gctctcaggc cccccgccca gtggccagga
 60
 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
 120
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
 180
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgtcacag
 240
 gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccaccca gaacacatgg
 300
 agaagccaca gcacaacctc agcggccgcc atgcaggacc ctgggtctca cccattgcac
 360
 ccaccgtgcg ggacccttgc gcctcaccgc gaacatccac agtgtgggac tgctgcgtct
 420
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg
 480
 atccctgagt ctcaccgcc gcaccgccg tacctgccgc atccgccatg cgggaccct
 540
 gcgtctcacc caccgcaccc gccgtgcggg a
 571

<210> 1916
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1916
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
 1 5 10 15
 Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
 20 25 30
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
 35 40 45
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
 50 55 60
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
 65 70 75 80
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
 85 90 95
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100 105 110
Pro Pro His Pro Pro Cys Gly
115
<210> 1917
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1917
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc
60
gatatgtctt gggctgccat caccttgtgg cgcgggtgtcg ttgcctccgc cttggaccgt
120
cateccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
180
gatttcgccg ccggatgggt gtcgaccgc ttggcagttc ccgtacatcg cacagtggcc
240
gactccccaa ggagacactt cccggtgact catttgagcgt tcaatcgga gacaaccac
300
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccggaa
360

<210> 1918
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1918
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
1 5 10 15
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
20 25 30
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
35 40 45
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
50 55 60
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
65 70 75 80
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
85 90 95
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
100 105 110
Val Cys Val Pro Gly Ser Pro Glu
115 120

<210> 1919
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1919
nncggccgca gctgtgtcca ctgcgtgtc cctgccact cggccatctg cctctctctt
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cacgcgcac cncggccacgc
 120
 ccacctccat cctctttgcc ccttactaaa cactggggagc ccgcccggcc gcgacaggcc
 180
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtacccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
 300
 agctcgggg caccgtatca tcccggtgccc tctccacct acccctgcca attg
 354

<210> 1920
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1920
 Xaa Gly Arg Ser Cys Val His Cys Ala Val Pro Ala Thr Ser Ala Ile
 1 5 10 15
 Cys Leu Ser Leu Pro Gly Cys Ser His Pro Ser Cys Thr Ala Glu Ala
 20 25 30
 Trp Pro Arg Ala Ser Arg Pro Arg Pro Pro Ser Ser Leu Pro Leu
 35 40 45
 Thr Lys His Trp Glu Pro Ala Arg Pro Arg Gln Ala Arg Pro Ala Gly
 50 55 60
 Arg Cys Arg Arg Thr Ala Gln Arg Ile Gln Gln Cys Lys Tyr Pro Thr
 65 70 75 80
 Tyr Ala Leu Thr Lys Cys Arg Pro Pro Pro Ser Pro Thr Ser Arg His
 85 90 95
 Arg Arg Arg Pro Ser Ser Arg Ala Pro Tyr His Pro Val Pro Ser Pro
 100 105 110
 Pro Tyr Pro Cys Gln Leu
 115

<210> 1921
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1921
 gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccacctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tggtagagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca
 60
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc
 120
 cagtatcaat atactgatca agaggggaage aaaggccatt catttaatct gcgattgttc
 180
 ccgttgccctt taaacggacg tatctttaa at gactttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgttttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

```

65          70          75          80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85          90          95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100        105        110
Pro Phe Thr Phe Glu Asn Pro
      115

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<210> 1925
 <211> 427
 <212> DNA
 <213> Homo sapiens

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<400> 1925
actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaacca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgcccc
120
gggctcccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaaca ggtccttgta caagcgacag ggagtgtctc caccagatgt ggcagccctt
240
ccacgccagg ctgtgtgggt cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctggtgcac
420
ggcgcgc
427

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<210> 1926
 <211> 104
 <212> PRT
 <213> Homo sapiens

```

<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
1      5      10      15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20      25      30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35      40      45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50      55      60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65      70      75      80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85      90      95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

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<210> 1927
 <211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcattgaa
 60
 acatctgctt tgacggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
 120
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
 180
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa
 360
 atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
 420
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser	1	5	10	15
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile	20	25	30	
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn	35	40	45	
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala	50	55	60	
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly	65	70	75	80
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr	85	90	95	
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu	100	105	110	
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln	115	120	125	
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu	130	135	140	
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro	145	150	155	160
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg					165	170		

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

nnccgcggac actcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggcc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggtt gccttctcta actctggctt ccgcacctg cttggattcc
360
tcattcttct ttttcttctt ggccccactc tcctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtctgag agtctcagtc tctccctcct gccaaagccg caggggtccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgttgga
660
agcggctcgg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctcatctctg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtctggt gatcttgtag tcagtcattg tgcccacctc ccaggacctt gagcaggaca
840
caa
843

<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

Leu	Pro	Gly	Cys	Ser	Pro	Gly	Thr	Cys	Pro	Ser	Arg	Arg	Asn	Thr	Leu
1				5					10					15	
Pro	Gly	Leu	Gly	Leu	Gly	Gln	Gly	Pro	Ser	Gly	Pro	Cys	Leu	Glu	Cys
			20					25					30		
Pro	Gln	Gln	Arg	Leu	Ala	Ser	Trp	Tyr	Tyr	Leu	Cys	Gln	Arg	Thr	Gln
		35					40					45			
Ala	Pro	Val	Gln	Pro	Cys	Leu	Trp	Ala	Gly	Ser	Glu	Pro	Ala	Pro	Arg
	50					55					60				
Pro	Arg	Ala	Pro	Glu	Ser	His	Arg	Ser	Gln	Ala	Arg	Leu	Ser	Trp	Gly
65				70					75					80	
Cys	Ser	Phe	Leu	Lys	Asn	Gly	Gly	Phe	Gly	Leu	Pro	Ser	Leu	Thr	Leu
			85					90					95		
Ala	Ser	Ala	Pro	Cys	Leu	Asp	Ser	Ser	Ser	Phe	Phe	Phe	Phe	Leu	Ala

100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120
 <210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens
 <400> 1931
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca
 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact
 120
 gaagaggagg tggtagtggt tgcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcctac taggacagct tcctccagc ccagtgtggc cacgctggtg tcctcggtaga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcacatggg
 360
 ttgcagagga aggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgctt ctctgggcta cgggtctctc acggtggctc ctggttgga ctgaagtggg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggccccag
 540
 cagggtgcc ccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtgcc ctcttcaggg agcctttcat aaccacctt cccttcact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1933

ggcgccgagc tgtggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
60
atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca
120
ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
180
ggcgccgatg actacctgaa caaaccttcc gatgcccgctg aattacttgc ccgggtgcgc
240
gctgtactgc gtccggcgctg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
295

<210> 1934

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1934

Gly	Ala	Glu	Leu	Trp	Ala	Ala	Met	Glu	Arg	Met	Pro	Ala	Asp	Leu	Ile
1			5				10				15				
Ile	Leu	Asp	Leu	Met	Leu	Pro	Gly	Asp	Asn	Gly	Leu	Leu	Leu	Cys	Gln
		20					25				30				
Arg	Leu	Arg	Gln	Gln	Tyr	Ala	Thr	Pro	Val	Ile	Met	Leu	Thr	Ala	Met
		35				40					45				
Gly	Glu	Leu	Ser	Asp	Arg	Val	Gly	Gly	Leu	Glu	Met	Gly	Ala	Asp	Asp
	50				55				60						
Tyr	Leu	Asn	Lys	Pro	Phe	Asp	Ala	Arg	Glu	Leu	Leu	Ala	Arg	Val	Arg
65					70				75					80	
Ala	Val	Leu	Arg	Pro	Ala	Cys	Glu	Asn	Arg	Pro	Thr	Leu	Gly	Asp	Val
			85					90						95	

Ser Arg

<210> 1935

<211> 298

<212> DNA

<213> Homo sapiens

<400> 1935

accggtgtgg cgggcgcggc cttcaccacc atcggtcca ccgggccgac ggcggttcg
60
caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
120
cccategcct cggcgcttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt
180
ggctcgatgg ccaaggtgct gaccttgctg tcggtgatc tgatcctgat gctgcgccg
240

caaggggtgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936
<211> 90
<212> PRT
<213> Homo sapiens

<400> 1936
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro
1 5 10 15
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Val Phe
20 25 30
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile
35 40 45
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala
50 55 60
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro
65 70 75 80
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys
85 90

<210> 1937
<211> 513
<212> DNA
<213> Homo sapiens

<400> 1937
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
60
gcctttaatt ctcccaattt atttcaaatt catcaaagaa ctcacactgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtcccttcac gcg
513

<210> 1938
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1938
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln			
20	25	30	
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg			
35	40	45	
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr			
50	55	60	
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr			
65	70	75	80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro			
85	90	95	
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val			
100	105	110	
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys			
115	120	125	
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His			
130	135	140	
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp			
145	150	155	160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala			
165	170		

<210> 1939
 <211> 1233
 <212> DNA
 <213> Homo sapiens

<400> 1939
 gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
 60
 aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
 120
 tgagggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
 180
 tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
 240
 ctcttaatat gcattatgta gggtatatct taagtgtggt gctgctaaca ttgccaggc
 300
 agcatctggt tcagctttat ctatatTTTT tgactgctct gctcctctat gctggacatc
 360
 aaatttccag ggactatgtt cggagtgaac tggggtttgc ctatgaggga ccaatgtatt
 420
 tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
 480
 ctttatgtct ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
 540
 ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
 600
 ctatgatttt tactggattg gaagttctct attttcttgg gtctaatctt ttggtacctt
 660
 ataaccttgc taaatctgca tacagagaat tgggtcaggt agtggaggta tatggccttc
 720
 tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atggttttct
 780

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<210> 1940
<211> 266
<212> PRT
<213> Homo sapiens
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<400> 1940																
Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg	
1				5					10					15		
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser	
			20					25					30			
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu	
			35				40					45				
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile	
	50					55				60						
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu	
65					70					75					80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile	
				85					90					95		
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro	
			100					105					110			
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile	
			115				120						125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys	
	130					135					140					
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu	
145					150					155					160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met	
				165					170					175		
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu	
			180					185					190			
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val	
			195				200					205				
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln	
	210					215					220					
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala	
225					230					235					240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg	

245 250 255
Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
260 265

<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1941
ctggggccct gccccacagc atcatgatgg ggaaactccc cctggggggtc gtctcccctt
60
atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
120
gcacagccta cggtcggggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
180
acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc
240
cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
300
ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
360
gctatgggcg ggagaagccc agtgcggggc cccccaccaa ggaggtccgg a
411

<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1942
Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
1 5 10 15
Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
20 25 30
Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
35 40 45
Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
50 55 60
Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
65 70 75 80
Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
85 90 95
Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
100 105 110
Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
115 120 125
Arg

<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens

<400> 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
60
gtctttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
120
acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc
180
ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
240
caggggtatct tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
300
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
360
ctctgcaatc tcacctgcta gagacg
386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5				10					15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50					55				60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
				85				90						95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105						110	

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cgccccacgt ggcctccaagg gcgtccacgc gcccctcctc
60
gaccgattgg tgtcgaacat ggcacgggtgg catgcgacgc gcaccaagat ccagctcaag
120
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
180
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
240
gaatcgctga tcatggacga tatacatctg gagttgcttg aactgcttga gctctactgt
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1				5					10					15	
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
		20						25					30		
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
		35				40					45				
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
	50					55					60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
65					70					75				80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
			85					90					95		
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
		100						105				110			
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
		115					120				125				
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
	130					135					140				
Asn	Met	Leu													
145															

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

cgcccggtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgctg taggcggggag
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 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctgggccc atgaggctct
 180
 gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctctgcagg gacacgggtg ggttgccga ggccccgtcc aaggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag
472

<210> 1948
<211> 150
<212> PRT
<213> Homo sapiens

<400> 1948
Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro
1 5 10 15
Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
20 25 30
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe
35 40 45
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala
50 55 60
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp
65 70 75 80
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln
85 90 95
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val
100 105 110
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg
115 120 125
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr
130 135 140
Val Thr Ala Tyr Thr Ala
145 150

<210> 1949
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1949
acgcgttgag ggaggcgaca tgcttcatga gcgcttggcg ccactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacgggacg ctcacaagct tccattggcc attcgcggtt cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgcc aatggcattc
240
cacagtacgc gcagcgggcg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggtt
395

<210> 1950
<211> 125
<212> PRT